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Issued October 25, 1907

U. S. DEPARTMENT OF AGRICULTURE.

BUREAU OF STATISTICS—BULLETIN NO. 55.

VICTOR H. OLMSTED, Chief of Bureau.

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MEAT SUPPLY AND SURPLUS,

WITH CONSIDERATION OF CONSUMPTION AND EXPORTS.

BY

GEORGE K. HOLMES,

Chief of Division of Foreign Markets.

WASHINGTON:

GOVERNMENT PRINTING OFFICE.

1907.

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BUREAU OF STATISTICS—BULLETIN NO. 55.

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GEORGE K. HOLMES,

Chief of Division of Foreign Markets.

WASHINGTON:

GOVERNMENT PRINTING OFFICE.

1907.

LETTER OF TRANSMITTAL.

U. S. Department of Agriculture,
Bureau of Statistics,
Washington, D. C., July 5, 1907.

Sir: I have the honor to transmit herewith the manuscript of an article prepared by George K. Holmes, Chief of the Division of Foreign Markets, concerning the dependence of the growing of beef animals upon the maintenance of exports of the surplus of meat above the requirements of domestic consumption, with the recommendation that the matter be published as Bulletin No. 55 of this Bureau.

The information contained herein is the result of a large amount of painstaking original investigation.

Very respectfully,

C. C. Clark,
Acting Chief of Bureau.

Hon. James Wilson,
Secretary of Agriculture.

CONTENTS.

Page.

Importance of the meat industry 1
Capital directly concerned 1
Meat animals 1
TABLE 1.—Value of domestic meat animals in contiguous United States 2
Other items of capital 2
TABLE 2.—Capital directly affected by exports of surplus meat 3
Comparison with other investments 3
TABLE 3.—Meat capital compared with other capitals and classes of wealth 4
Disposal of the national surplus 4
Review of exports 4
Historical period, 1851–1889 4
TABLE 4.—Domestic exports of meat animals and some packing-house products, by articles, 1851–1889 5
Recent period, 1890–1906 7
TABLE 5.—Domestic exports of meat animals and packing-house products, by articles, 1890–1907 9
General tendency of exports, 1878–1882 to 1903–1906 12
Largest average quantity is 2,209,000,000 pounds 12
TABLE 6.—Domestic exports of meat animals and some packing-house products: Annual means for 1878–1882 to 1903–1906 12
Exports of 1907 13
Perceptible advances 13
Countries to which meat is sent 14
Features of specialized trade 14
TABLE 7.—Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906 14
Foreign preferences for fats 35
Dietary and culinary demands 35
TABLE 8.—Value of total packing-house fats and oils and fat meats expressed as a percentage of the value of total exports of meat animals and packing-house products, by principal countries to which consigned, 1890–1906 36
Meat imports 37
Small and specialized 37
Number of meat animals exported 38
Over one-tenth of the supply 38
TABLE 9.—Number of meat animals exported and consumed in the United States, 1900 38
Pounds of meat exported 39
One-eighth of the supply of 19,000,000,000 pounds 39
TABLE 10.—Percentage of meat supply exported, 1900 39
Fraction of meat supply exported in 1880, 1890, and 1900 40
Large increase indicated 40
TABLE 11.—Estimated fraction of meat supply exported in 1880 and 1890, compared with 1900 40
Exported fraction of lard and tallow 41
Prominent place occupied by lard 41
Volume of pork exports nearly sustained by Iowa 41
Swine in farm economy 41
Meat animals exported per capita of population 41
Seven times more swine than cattle 41
TABLE 12.—Per capita slaughter and export of meat animals, 1900. 42
Stock of meat animals 42
Number in the world 42
Place occupied by the United States 42
TABLE 13.—Chief meat animals of the world 43
Number in the United States 43
Latest statistics 43
TABLE 14.—Total number of meat animals, 1900 and 1907, in contiguous United States 44

Stock of meat animals—Continued.
Number in the United States—Continued. Page.
Census enumerations, 1840–1900 44
TABLE 15.—Number of meat animals on farms and ranges June 1, ascertained by census numerations in contiguous United States. 45
Numerical relations of the classes 45
TABLE 16.—Relative composition of the stock of meat animals, 1840–1900 45
Meat animals compared with population 46
Declining ratios 46
TABLE 17.—Composite meat animal per capita, 1840–1900 47
Cattle, sheep, and swine in the relative decrease 47
TABLE 18.—Number of cattle, sheep, and swine on farms and ranges, per capita, 1840–1900 47
Meat production 47
Method of procedure in estimating 47
Original and based upon collected information 47
Establishing the factors 48
Inquiries concerning fecundity, ages, weight, marketing, and losses 49
Slaughter of calves 50
Estimated to have been 5,831,000 in 1900 50
TABLE 19.—Computation of slaughtered calves, 1900 50
Cattle slaughter 50
Estimates for the census classes 50
TABLE 20.—Computation of slaughtered cattle, except calves, 1900. 51
Slaughter of lambs and sheep 51
Numbers nearly equal 51
TABLE 21.—Computations of slaughtered lambs and sheep, 1900 51
Swine slaughter 52
Number estimated at 50,145,000 52
TABLE 22.—Computation of slaughtered swine, 1900 52
Summary of number of slaughtered animals 52
Small contribution by goats, game, and horses 52
Calves and cattle 53
Lambs and sheep 53
Swine 53
All animals 53
Pounds of dressed meat supply 53
Average weights per animal 53
Total pounds for each class of animals 54
TABLE 23.—Number of slaughtered and exported meat animals and weight of dressed meat in the United States, 1900 54
Pounds of extra edible parts 55
Test weighings by packing-houses 55
Parts and weights 56
TABLE 24.—Weights of edible parts not included in dressed weight of meat animals 57
Total weight of extra edible parts 57
Total meat supply 57
Sum of dressed meat and extra edible parts 57
TABLE 25.—Weight of edible parts of meat animals not included in dressed weight and of total meat supply 58
Weight of meat in different limitations 58
Summary of the elements 58
Three aspects of the supply 59
Swine and cattle compared 59
Average meat animal 60
TABLE 26.—Total weights of the constituent parts of the meat supply, 1900 60
Subdivisions of live weight of meat animals 60
Expressed in diagram 60
Horse meat 61
Small slaughter, consumption and export 61
Lard and tallow 61
Estimated per capita consumption 61
TABLE 27.—Computed lard and tallow production and consumption, 1900 62
Commercial sausage output 62
Reckoned to be nearly 1,000,000,000 pounds 62

Meat production—Continued. Page.
Live weight ... 62
Cattle occupy leading place ... 62
TABLE 28.—Live weight of slaughtered meat animals, 1900 ... 63
Ratio between slaughter and stock ... 64
Superiority of swine ... 64
TABLE 29.—Percentage of existing animals slaughtered and exported, 1900 ... 64
Farm value of the slaughter ... 65
Nearly three-quarters of a billion dollars in 1907 ... 65
TABLE 30.—Farm value of slaughtered and exported animals, 1900 ... 65
Live and dressed weight ... 66
Comparative meat fractions ... 66
High position of poultry ... 66
Highest place for swine ... 67
TABLE 31.—Relation between live and dressed weight of meat animals and of poultry ... 67
Total for large slaughter houses ... 68
Gaining upon the small ones ... 68
Fraction of the national slaughter ... 68
TABLE 32.—Number of cattle, sheep, and swine slaughtered at principal places ... 68
TABLE 33.—Percentage of total slaughter done in large slaughter-houses, 1900 ... 69
Meat consumption ... 69
Per capita and per family ... 69
Ratios for number of animals ... 69
Declining ratio for meat indicated ... 70
Analysis of the decline ... 70
Consumption of dressed weight ... 71
Total exports substracted ... 71
Various averages computed ... 72
Edible dressed weight ... 72
Bones and retailer's trimmings excluded ... 72
TABLE 34.—Per capita and per family consumption of dressed meat in the United States, 1900 ... 73
Extra edible parts included ... 73
With dressed weight ... 73
With edible dressed weight ... 74
Significance of the three ratios ... 74
TABLE 35.—Per capita and per family consumption of meat, dressed and extra edible parts combined ... 74
Computed average consumption not unreasonable ... 74
Per capita exports ... 75
Would increase consumption by one-seventh ... 75
TABLE 36.—Per capita consumption of exported meat, if retained in this country and consumed, 1900 ... 75
Classes of meat as relative components in consumption ... 75
Swine lead in food pounds ... 75
TABLE 37.—Percentage of different classes of meat animals and meat in consumption and in exports, 1900 ... 76
Meat consumption in workingmen's families ... 76
Quantity and cost ... 76
TABLE 38.—Consumption of meat by 2,567 families of workingmen in 1901 ... 77
TABLE 39.—Cost of meat consumed by 2,567 families of workingmen in 1901 ... 77
Meat cost in poor families ... 77
TABLE 40.—Expenditures for meat by poor families in Washington, D. C., for one year ... 78
Kinds of meat in workingmen's consumption ... 78
TABLE 41.—Relative importance in workingmen's families of quantities of meat consumed in 1901 ... 78
Consumers' cost per pound ... 79
TABLE 42.—Average cost of meat per pound consumed by 2,567 families of workingmen in 1901 ... 79

Meat consumption—Continued. Page.
Trend of retail meat prices, 1890–1905 80
Bureau of Labor's series of index numbers 80
TABLE 43.—Relative retail price of meat, 1890–1905 80
Retail meat prices and farm animal prices compared 80
TABLE 44.—Relative retail prices of meat and prices of meat animals at the farm, means for 1890–1893, 1894–1897, and 1902–1905. 81
Dun's series of wholesale meat prices 81
TABLE 45.—Dun's index numbers for wholesale prices of meats, 1860–1906 81
Consumers' yearly meat bill 82
Total for the people of the United States 82
Meat in the dietary 82
Limited by other foods 82
Relative place in family expenses 82
TABLE 46.—Relation of meat cost to total food cost and other costs of living in expenditures of workingmen's families, 1901 83
Nutritive equivalence of meat and other foods 83
TABLE. 47.—Quantity of meat as purchased required to equal the protein and energy of specified foods 84
Cost of substitutes for meat 86
TABLE 48.—Comparative cost of nutrients in different foods 87
Foreign meat consumption 87
United Kingdom 87
Investigation by Royal Statistical Society 87
TABLE 49.—Estimate of cattle slaughter in the United Kingdom, 1898–1902 88
TABLE 50.—Estimate of sheep slaughter in the United Kingdom, 1898–1902 88
TABLE 51.—Estimate of swine slaughter in the United Kingdom, 1898–1902 89
Meat supply 89
TABLE 52.—Meat supply of the United Kingdom, average of 1898–1902 89
Per capita consumption 89
TABLE 53.—Per capita consumption of meat in the United Kingdom, average of 1898–1902 90
TABLE 54.—Consumption of meat per year in the United Kingdom, by classes of the population 90
Germany 91
Records of official inspection 91
TABLE 55.—Meat production, imports, and consumption in Germany, 1904–1906 92
Imports, 1904–1906 94
TABLE 56.—Imports and exports of meats, Germany, 1904–1906 94
Australasia 95
High rate of consumption 95
TABLE 57.—Per capita consumption of meat in Australasia 96
France 96
Estimates of meat consumption 96
Cuba 96
Consumption, domestic slaughter, and imports 96
Italy 97
Investigation of Director-General of Public Health 97
TABLE 58.—Slaughter and consumption of meat in Italy in 1903 . 97
Horse flesh as food 97
Historical sketch of hippophagy 97
Consumption of meat in many countries 98
Collected ratios of several authorities 98
TABLE 59.—Per capita consumption of meat by principal countries. 98
Hides and skins 99
Number produced in 1900 99
National consumption of beef hides 99
TABLE 60.—Number of hides and skins produced, 1900 99
TABLE 61.—Consumption of beef hides, 1900 100

MEAT SUPPLY AND SURPLUS.

IMPORTANCE OF THE MEAT INDUSTRY.

CAPITAL DIRECTLY CONCERNED.

MEAT ANIMALS.

With a meat export in 1900 amounting to one-eighth of the production, the growing of meat animals and the manufacture of the products derived from their slaughter are largely dependent upon the export trade, and the foreign marketing is essential to the maintenance of the present magnitude of the meat industry and of prices profitable to the farmer.

Although this is a country of meat eaters, with a total population estimated by the Bureau of the Census at 84,000,000 in 1906, the surplus of meat produced in 1900, as estimated in the preparation of this bulletin, was large enough to feed either the United Kingdom or the German Empire for nearly half a year, or both for nearly three months; the population of those two countries in 1901 was 98,000,000, as compared with a population of 76,000,000 in this country the year before.

If such an immense quantity of surplus meat food were to be confined within this country by the refusal of foreign countries to buy it, there would follow consequences to farmer, rangeman, slaughterer, and packer which would be financially disastrous.

In the valuation of all domestic animals in the census of 1900 the kind of meat animals having the highest value in the aggregate was cattle. The value of all cattle on farms and ranges and off farms and ranges in cities, villages, and elsewhere, was $1,500,000,000, about one-third of which is the value given to dairy cows and two-thirds to other cattle. Swine occupy second place in order of value, but much below the total for cattle, the figures given being $239,000,000. Sheep have third place with $171,000,000, and goats have the small place indicated by $3,400,000. A grand total value of all meat animals on and off farms and ranges, according to the census, was $1,929,000,000.

The latest annual estimate of the value of meat animals on farms and ranges made by the Bureau of Statistics of the Department of Agriculture, January 1, 1907, gives to dairy cows the value of $645,500,000, or an increase of $137,000,000 over 1900. The decreased total value given to other cattle, although the value is larger per head, somewhat offsets the increase for dairy cows, since the loss in other cattle is $85,000,000 from the value of 1900. The

estimate for sheep for 1907 indicates an increase of $34,000,000 in value above the census statement, and for swine an increase of $186,000,000; there is no estimate for goats, which, for present purposes, may be regarded as having the 1900 census value.

Meat animals on farms and ranges January 1, 1907, increased in value in the aggregate $272,000,000 above the census amount of June 1, 1900, and rose to a total value of $2,152,000,000. The estimates of this Department are for January 1, a time of the year when the number of swine and sheep is about one-fifth less than that on June 1, which is the census date, and the number of cattle is less in midwinter than on June 1. Hence, if the Department's statements for January 1 were raised to a basis of June 1, the foregoing values for 1907 would be increased.

TABLE 1.—*Value of domestic meat animals in contiguous United States.*

[Including calves and lambs under 1 year.]

Item.	Total.	Cattle.		
		Total.	Dairy cows.	Other cattle.
Census.				
1900, June 1:				
On farms and ranges	$1,880,651,132	$1,475,204,633	$508,616,501	$966,588,132
Off farms and ranges	48,627,220	41,102,637	28,879,619	12,223,018
Total	1,929,278,352	1,516,307,270	537,496,120	978,811,150
Department of Agriculture.				
1907, January 1: On farms and ranges	2,152,320,319	1,527,054,000	645,497,000	881,557,000

Item.	Sheep.	Swine.	Goats.
Census.			
1900, June 1:			
On farms and ranges	$170,203,119	$231,978,031	$3,265,349
Off farms and ranges	678,624	6,708,841	137,118
Total	170,881,743	238,686,872	3,402,467
Department of Agriculture.			
1907, January 1: On farms and ranges	204,210,000	417,791,000	[a] 3,265,349

[a] Assumed to be the same as in the census year.

OTHER ITEMS OF CAPITAL.

Not only are the prices of meat animals directly affected by the marketing of the national surplus of meat, but likewise the value of the farms and ranges on which they are raised. While nearly all farms maintain at least one meat animal, the farms and ranges devoted especially to the production of live stock are the ones more directly affected.

The value of live-stock farms and ranges was estimated by the Bureau of Statistics of the Department of Agriculture in 1905 to be $7,951,000,000, by adding to the census valuation the increase of the succeeding five years. Some horse and mule farms are unavoidably included.

To the value of meat animals and of live-stock farms and ranges should be added the value of implements and machinery on such farms and ranges, or $235,500,000.

Then there is a large amount of capital invested in wholesale slaughtering, meat packing, lard refining, and oleomargarin establishments which was determined by the Bureau of the Census to be $238,000,000 in 1904.

The sum of the foregoing items of capital directly affected by the export of the national surplus of meat is $10,625,000,000 and this capital is directly dependent upon such disposal for its profitable use and, indeed, for the integrity of the investment.

In addition to the capital concerned there are annual productions that should be noted. Upon the basis of census values the farm value of the cattle, sheep, and swine slaughtered and exported alive in 1900 was $649,417,340. This is a computed value and may be above or below the fact for 1900; but whatever the true value was for that year, it was much larger for 1906, with its high values and large exports as well as perhaps increased home consumption.

The great annual corn crop of the country, having a value of $1,167,000,000 in 1906, is very largely converted into meat, fats, and oils, and a large fraction of this crop is exported in the form of the commodities mentioned.

TABLE 2.—*Capital directly affected by exports of surplus meat.*

Item.	Value.
Value of domestic meat animals on farms and ranges, January 1, 1907	$2,152,320,349
Value of domestic meat animals not on farms and ranges, June 1, 1900	48,627,220
Value of live-stock farms and ranges, 1905, autumn	7,950,919,310
Value of implements and machinery on live-stock farms and ranges, June 1, 1900	235,477,714
Capital of wholesale slaughtering, meat packing, lard refining, and oleomargarin establishments, 1904	237,714,690
Total	10,625,059,283

COMPARISON WITH OTHER INVESTMENTS.

Better to understand the magnitude of the interests involved in the maintenance of meat exports comparisons may be made with other aggregates of capital and classes of wealth. The capital directly related to meat production for export, $10,625,000,000, is five-sixths as large as all capital invested in manufacturing in 1904. It is barely under the figures representing the capitalization of the net earnings of steam railroads, estimated by the Bureau of the Census, June 1, 1904; it is a little greater than the estimated true value of all property situated in the South Central division of States in 1904, as also of all property situated in the Rocky Mountain and Pacific regions. It is more than one billion dollars above the value of the real estate and of the implements and machinery of farms devoted chiefly to producing cotton, hay, and grain; or the estimated true value of all property situated in New England in 1904; or the estimated true value of the entire real estate of the South in 1904. It is nearly twice the value of the real estate and of the implements and machinery of farms devoted chiefly to producing cotton, fruit, rice, sugar, tobacco, vegetables, and to general farming; or more than twice the estimated true value of street railways, shipping, waterworks, telegraph and telephone systems, electric light and power stations, Pullman and private cars, and canals in 1904.

TABLE 3.—*Meat capital compared with other capital and classes of wealth.*

Item.	Value.
Capital directly related to meat production for export	$10,625,059,283
Capital invested in manufacturing, 1904	12,686,265,673
Capitalization of net earnings of steam railroads, June 1, 1904	11,244,752,000
Value of real estate (1905, autumn) and of implements and machinery (1900) of farms devoted chiefly to producing cotton, hay, and grain	9,074,168,745
Value of real estate (1905, autumn) and of implements and machinery (1900) of farms devoted chiefly to producing cotton, fruit, rice, sugar, tobacco, vegetables, and to general farming (including small specialties)	5,792,314,927
Estimated true value of street railways, shipping, waterworks, telegraph and telephone systems, electric light and power stations, Pullman and private cars, and canals (1904)	4,840,546,909
Estimated true value of entire real estate of South Atlantic and South Central divisions, 1904	9,505,995,304
Estimated true value of all property situated in New England, 1904	8,823,325,592
Estimated true value of all property situated in the South Central division, 1904	10,052,467,528
Estimated true value of all property situated in the Western division (Rocky Mountain and Pacific regions), 1904	9,992,581,271

DISPOSAL OF THE NATIONAL SURPLUS.

REVIEW OF EXPORTS.

HISTORICAL PERIOD, 1851 TO 1889.

The exporting of meat and of various edible products of slaughtered animals from this country grew to notable proportions about 1875 to 1880, but some of these commodities were of considerable account in the exports of half a century ago. Exports antedating 1890 may be regarded as now belonging to an historical period, and with this understanding Table 4 has been prepared to express the exports of the number of meat animals and of the quantities of meat and meat products from 1851 to 1889 as far as the classifications and publications of the Bureau of Statistics of the Department of Commerce and Labor permit.

Exported live cattle first passed the 100,000 mark in number in 1879 and the 200,000 mark in 1889. The exported live sheep were first above the 100,000 mark in 1874 and above 200,000 in 1879, and the largest number ever exported in one year was 337,251 in 1883. The exports of live swine were much less in number than those of live cattle and sheep, and in only one year, 1874, did the number go above 100,000.

The first prominent exports of meat and its products were cured meats and fats. Many millions of pounds of salted or pickled beef were exported annually before 1861, and the trade has been a steady and large one since the middle of the last century.

This class of beef has usually been exceeded in exports by the exports of salted or pickled pork, which rose in quantity to between fifty and one hundred million pounds annually from 1872 to 1889.

Bacon is the class of meat having the largest exports during the period under consideration. By 1854 the exports amounted to 46,000,000 pounds; the quantity was over 200,000,000 pounds in 1863, nearly 400,000,000 pounds in 1873, nearly 600,000,000 pounds in 1878, and 760,000,000 pounds in 1880, the largest amount ever exported in one year.

The first separate account of exports of hams was published in 1881, when the exports amounted to 74,000,000 pounds. The first

published exports of quantity of canned meat were of canned beef in 1887, when the trade had grown to 43,000,000 pounds.

With the invention of the transportation of fresh meat in cold storage the exports of fresh meats soon assumed large proportions. The first account of the quantity of these exports was published for 1877, when 49,000,000 pounds of fresh beef were exported and 349,000 pounds of fresh mutton. The fresh beef exports more than doubled the above figure before 1890, and the exports of fresh mutton went as high as 3,380,000 pounds in 1881, but subsequently much declined. Fresh pork first appears in published quantity exported in 1884, with 185,000 pounds, but the quantity fell to 23,000 pounds in 1889.

Animal fats were exported in large quantities half a century ago. In 1851, 20,000,000 pounds of lard were exported. The quantity exceeded 100,000,000 pounds by 1862, 200,000,000 by 1873, and reached 378,000,000 by 1881, after which there was a decline to 1889. Tallow had an export of 8,000,000 pounds in 1851, and after numerous fluctuations rose to 102,000,000 pounds in 1874 and 111,000,000 pounds in 1880, quantities that are among the highest ever reached.

Oleo oil became a prominent export in 1878, when the quantity was first published as 1,698,000 pounds. The next year the exports were 13,000,000 pounds, and they went as high as 46,000,000 pounds in one year before 1890.

Oleomargarin rapidly grew in its exports after the establishment of its manufacture, the published quantity of exports first appearing in 1882, when 2,157,000 pounds were exported, which was slightly under the largest export for one year previous to 1890.

TABLE 4.—*Domestic exports of meat animals and some packing-house products, by articles, 1851–1889.*

Year ending June 30—	Cattle.	Sheep.	Swine.	Beef, cured: Salted or pickled.	Lard.	Mutton.
	Number.	*Number.*	*Number.*	*Barrels.*	*Pounds.*	*Pounds.*
1851	1,350	4,357	1,030	90,648	19,683,082	.....
1852	1,078	2,968	185	122,259	21,281,951	.....
1853	1,076	3,669	22	126,041	24,435,014	.....
1854	1,022	2,642	279	126,220	44,450,154	.....
1855	1,501	4,235	431	[a] 147,804	39,025,492	.....
1856	2,478	3,520	1,391	[a] 127,189	37,582,271	.....
1857	4,325	4,373	923	[a] 78,340	40,246,544	.....
1858	28,247	[b]	96,000	[a] 119,807	33,022,286	.....
1859	32,513	[b]	95,509	[a] 154,005	28,362,706	.....
1860	27,501	[b]	48,355	[a] 194,294	40,289,519	.....
1861	8,885	[b]	463	[a] 128,201	47,908,911	.....
1862	3,634	[b]	3,306	[a] 136,022	118,573,307	.....
1863	5,509	[b]	9,467	[a] 146,299	155,336,596	.....
1864	6,191	9,301	9,199	178,332	97,190,765	.....
1865	9,589	15,182	1,400	[a] 135,646	44,480,136	.....
				Pounds.		
1866	7,730	12,478	951	19,053,800	30,110,451	.....
1867	10,221	7,882	3,577	14,182,562	45,608,031	.....
1868	16,120	17,902	1,399	22,683,531	64,555,462	.....
1869	[b]	[b]	[b]	27,299,197	41,887,545	.....
1870	27,530	39,570	12,058	26,727,773	35,808,530	.....
1871	20,530	45,465	8,770	43,880,217	80,037,297	.....
1872	28,033	35,218	56,110	26,652,094	199,651,660	.....
1873	35,455	66,717	99,720	31,605,196	230,534,207	.....
1874	56,067	124,248	158,581	36,036,537	205,527,471	.....
1875	57,211	124,416	64,979	48,243,251	166,869,393	.....
1876	51,593	110,312	68,044	36,596,150	168,405,839	.....

[a] This quantity has been computed by combining shipments in tierces and shipments in barrels at the rate of 1½ barrels to each tierce.

[b] Not stated.

TABLE 4.—*Domestic exports of meat animals and some packing-house products, by articles, 1851–1889*—Continued.

Year ending June 30—	Cattle.	Sheep.	Swine.	Beef, cured: Salted or pickled.	Lard.	Mutton.
	Number.	*Number.*	*Number.*	*Pounds.*	*Pounds.*	*Pounds.*
1877	50,001	179,017	65,107	39,155,153	234,741,233	349,368
1878	80,040	183,995	29,284	38,831,379	342,766,254	130,582
1879	136,720	215,680	75,129	36,950,563	326,658,686	1,440,197
1880	182,756	209,137	83,434	45,237,472	374,979,286	2,335,858
1881	185,707	179,919	77,456	40,698,649	378,142,496	3,380,147
1882	108,110	139,676	36,368	45,899,737	250,367,740	1,373,384
1883	104,444	337,251	16,129	41,680,623	224,718,474	2,158,058
1884	190,518	273,874	46,382	42,379,911	265,094,719	2,932,855
1885	135,890	234,509	55,025	48,143,711	283,216,339	3,355,660
1886	119,065	177,594	74,187	58,903,370	293,728,019	1,059,435
1887	106,459	121,701	75,383	36,287,188	321,533,746	371,572
1888	140,208	143,817	23,755	48,980,269	297,740,007	224,738
1889	205,786	128,852	45,128	55,006,399	318,242,990	296,220

Year ending June 30—	Oil, lard.	Oil, oleo.	Oils, other animal.	Pork, cured: Bacon.	Pork, cured: Salted or pickled.	Tallow.
	Gallons.	*Pounds.*	*Gallons.*	*Pounds.*	*Barrels.*	*Pounds.*
1851	.....	.....	.....	18,027,302	165,206	8,198,278
1852	.....	.....	.....	5,746,816	83,382	4,767,020
1853	.....	.....	.....	18,390,027	129,881	3,926,598
1854	.....	.....	.....	45,953,473	220,147	9,325,471
1855	103,200	.....	.....	38,188,989	[a] 298,760	11,866,992
1856	212,262	.....	.....	41,748,092	[a] 281,395	7,458,471
1857	91,432	.....	.....	43,863,539	[a] 144,513	5,698,315
1858	68,342	.....	.....	20,954,374	[a] 159,875	8,283,812
1859	56,675	.....	.....	11,989,694	[a] 205,742	7,103,045
1860	60,209	.....	.....	25,844,610	[a] 204,743	15,269,535
1861	85,676	.....	.....	50,264,267	[a] 156,487	29,718,364
1862	239,608	.....	.....	141,212,786	[a] 309,102	46,773,768
1863	1,259,063	.....	.....	218,243,609	[a] 327,852	63,792,754
1864	440,546	.....	.....	110,886,446	317,597	55,197,914
1865	100,520	.....	.....	46,053,034	[a] 208,934	30,884,500
					Pounds.	
1866	42,358	.....	1,249	37,588,930	30,056,788	19,364,686
1867	144,158	.....	13,968	25,648,226	27,374,877	23,296,931
1868	279,432	.....	88,522	43,659,064	28,690,133	22,682,412
1869	[b]	.....	[b]	49,228,165	24,439,832	20,534,628
1870	90,774	.....	501	38,968,256	24,639,831	37,513,056
1871	147,802	.....	80	71,446,854	39,250,750	33,859,317
1872	533,147	.....	26,393	246,208,143	57,169,518	76,151,218
1873	388,836	.....	10,984	395,381,737	64,147,461	79,170,558
1874	252,577	.....	17,090	347,405,405	70,482,379	101,755,631
1875	146,594	.....	12,136	250,286,549	56,152,331	65,461,619
1876	146,323	[b]	22,631	327,730,172	54,195,118	72,432,775
1877	347,305	[b]	19,932	460,057,146	69,671,894	91,472,803
1878	1,553,314	1,698,401	19,823	592,814,351	71,889,255	85,505,919
1879	1,963,208	12,687,318	145,641	732,249,576	84,401,676	99,963,752
1880	1,507,596	19,844,256	30,383	759,773,109	95,949,780	110,767,627
1881	836,255	26,327,676	77,496	673,274,361	107,928,086	96,403,372
1882	506,259	19,714,338	63,159	428,481,482	80,447,466	50,474,210
1883	379,205	29,031,064	72,142	294,118,759	62,116,302	38,810,098
1884	712,696	37,785,159	159,486	341,579,410	60,363,313	63,091,103
1885	916,157	37,120,217	106,793	345,924,217	71,649,365	50,431,719
1886	973,229	27,729,885	360,223	369,423,351	87,196,966	40,919,951
1887	975,163	45,712,985	570,376	364,417,744	85,869,367	63,278,403
1888	930,616	30,146,595	617,737	331,306,703	58,836,966	92,483,052
1889	861,303	28,102,534	558,080	357,377,399	64,110,845	77,844,555

[a] This quantity has been computed by combining shipments in tierces and shipments in barrels at the rate of 1½ barrels to each tierce.

[b] Not stated.

TABLE 4.—*Domestic imports of meat animals and some packing-house products, by articles, 1851–1889*—Continued.

Year ending June 30—	Beef, canned.	Beef, cured, other than salted or pickled.	Beef, fresh.	Oleomargarin.	Pork, cured, hams.	Pork, fresh.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
1877			49,210,990			
1878			54,046,771			
1879			54,025,832			
1880			84,717,194			
1881			106,004,812		73,670,184	
1882			69,586,466	2,157,446	39,545,158	
1883			81,064,373	1,950,301	46,139,911	
1884	(a)	641,163	120,784,064	1,537,682	47,919,958	185,417
1885	(a)	572,427	115,780,830	761,938	54,202,902	424,103
1886	(a)	824,955	99,423,362	928,053	50,365,445	70,749
1887	43,050,588	192,191	83,560,874	834,574	55,505,211	23,930
1888	40,458,375	83,151	93,498,273	1,729,327	44,132,980	63,187
1889	51,025,254	194,036	137,895,391	2,192,047	42,847,247	22,794

[a] Not stated.

RECENT PERIOD, 1890 TO 1906.

Exports of live meat animals and meat and its products met with much rough weather in the last decade of the nineteenth century and in the years subsequent. The competition of cheaper and more abundant American meats and meat products has been met by restrictive policies in importing countries in Europe; but, in spite of such policies and with a continued reception of live meat animals and meat and meat products by the United Kingdom without obstructive restrictions, the business of exporting these commodities increased mightily during the seventeen years following 1889.

The value of the exports of meat animals and packing-house products (including nonedible products) increased from $161,000,000 in 1890 to $252,000,000 in 1906; the live meat animals from $32,000,000 in 1890 to $44,000,000 in 1906; and the packing-house products from $129,000,000 in 1890 to $208,000,000 in 1906.

The number of exported cattle rose to nearly 600,000 annually from 1904 to 1906; the number of exported sheep reached its highest figure in 1896 with 492,000, after which the annual number has fluctuated much, but, on the whole, has declined. Swine exports have become both irregular and small, going as high as 96,000 in 1891 and as low as 1,553 in 1894.

Exports of fresh meats increased in quantity after 1889, but declined in the last few years; in 1890 173,000,000 pounds of fresh beef were exported, the quantity was as high as 351,000,000 in 1901, and was 268,000,000 pounds in 1906.

At times of scarcity in the supply of fresh mutton from Australasia, the exports from this country have risen to a comparatively high figure, the highest quantity being 6,000,000 pounds in 1903; but, aside from such special demand the exports from this country in recent years have been about half a million pounds annually.

Fresh pork exports grew rapidly in quantity from 279,000 pounds in 1890 to 44,000,000 pounds in 1902, but the quantity fell to 13,000,000 pounds in 1906.

Canned beef was in great demand abroad during the seventeen years under review; the exports in 1890 were 83,000,000 pounds and in the following year 110,000,000 pounds, the highest figure ever

touched. The smallest quantity for one year of the seventeen years was 37,000,000 pounds in 1898.

Canned pork first appears in published exports for 1900 when the quantity was 8,500,000 pounds; the highest exported quantity for one year was 13,600,000 pounds in 1903, and the quantity for 1906 was 12,700,000 pounds.

In addition to canned beef and canned pork other canned meats are exported, the value, but not the quantity, being reported. This miscellaneous class of canned meats was first stated in a published report for 1900 when the value was $1,700,000; the highest value for one year was $2,300,000 for 1904; and the value for 1906 was $1,600,000.

The cured meats have continued to hold prominent places in the recent years under review. Salted or pickled beef diminished in exports from 98,000,000 pounds in 1890 to 44,000,000 pounds in 1898, after which there was some recovery and in 1906 a sudden increase to 81,000,000 pounds. During the seventeen years other sorts of cured beef were exported in annual quantities ranging from about 100,000 pounds to over 2,000,000 pounds.

Salted or pickled pork, notwithstanding considerable annual fluctuations, has increased in exports during the seventeen years, the quantity in 1890 being 80,000,000 pounds and, in 1906, 142,000,000 pounds, the smallest quantity between being 52,000,000 pounds in 1893.

During seven of the seventeen years, more than half a billion pounds of bacon were exported yearly, the largest quantity being 650,000,000 pounds in 1898, but from that number the quantity declined to 207,000,000 pounds in 1903, after which there was a partial recovery to 361,000,000 pounds in 1906.

Exports of hams rose from 77,000,000 pounds in 1890 to 200,000,000 pounds in 1898, after which year the annual exports have fluctuated around that number, the highest exported quantity being 228,000,000 pounds in 1902.

Sausage exports became large enough to receive separate attention in published statements by 1901, when the exports reached 9,800,000 pounds; subsequently the exports of this commodity have ranged between 5,000,000 and 8,000,000 pounds.

Sausage casings have gained much in foreign demand since 1889 and the value of their exports rose from $700,000 in 1890 to $2,600,000 in 1906.

No meat or meat product has equaled lard in the quantity of its export. This commodity has occupied a place of increasing importance, and during the seventeen years under review its exports grew from 471,000,000 pounds in 1890 to 742,000,000 pounds in 1906.

Lard compounds, likewise, although exported in quantities that are small compared with those of lard, gained suddenly in importance, and in 1897 jumped from previous annual exports of one to two million pounds to 18,000,000 pounds. The quantity grew to 68,000,000 pounds in 1906.

Another meat product meeting a persistent demand abroad is oleo oil, the exports of which have increased about 200 per cent during the seventeen years under review, or from 68,000,000 pounds in 1890 to 210,000,000 pounds in 1906. For the same reason, oleomargarin

has increased much in favor as an export and in 1906 reached its highest figure, 12,000,000 pounds.

Tallow exports have fluctuated much during the seventeen years, going as low as 26,000,000 pounds in 1895 and as high as 113,000,000 in 1890. The period closed with 98,000,000 pounds of exports in 1906.

Although some packing-house products are not foods, they are included in Table 5 because their production is so closely related to the business of slaughtering and packing. These articles are such commodities as bones, soap stock, hair, bristles, hides and skins, etc.; but in the case of some of these items imports are of greater account than the exports.

TABLE 5.—*Domestic exports of meat animals and packing-house products, by articles, 1890–1907.*

[Figures for 1907 are subject to small changes.]

Year ending June 30—	Value of total domestic merchandise.	Value of total farm products.	Value of total meat animals and packing-house products.	Value of total packing-house fats and oils and fat meats.[a]
1890	$845,293,828	$634,855,869	$161,446,164	$92,002,411
1891	872,270,283	652,407,931	166,877,515	93,141,324
1892	1,015,732,011	803,122,045	170,310,885	92,901,027
1893	831,030,785	621,201,671	160,652,034	90,878,586
1894	869,204,937	636,633,747	177,926,070	100,738,089
1895	793,392,599	558,385,861	166,303,786	89,450,613
1896	863,200,487	574,398,264	171,566,483	84,101,379
1897	1,032,007,603	689,755,193	172,906,190	80,003,816
1898	1,210,291,913	859,018,946	201,646,500	105,870,550
1899	1,203,931,222	792,811,733	204,031,254	109,996,869
1900	1,370,763,571	844,616,530	211,662,225	109,406,694
1901	1,460,462,806	951,628,331	232,223,650	115,652,119
1902	1,355,481,861	857,113,533	228,673,701	118,552,197
1903	1,392,231,302	878,480,557	210,370,073	104,396,750
1904	1,435,179,017	859,160,264	221,706,229	105,013,964
1905	1,491,744,641	826,904,777	213,010,292	104,998,679
1906	1,717,953,382	976,047,104	251,190,032	139,637,756
1907	1,851,553,956	1,055,257,800	239,090,807	135,736,014

Year ending June 30—	Total value of cattle, sheep, and swine.	Meat animals.					
		Cattle.		Sheep.		Swine.	
		Number.	Value.	Number.	Value.	Number.	Value.
1890	$32,413,250	394,836	$31,261,131	67,521	$243,077	91,148	$909,042
1891	31,852,988	374,679	30,445,249	60,947	261,109	95,654	1,146,630
1892	35,624,281	394,607	35,099,095	46,960	161,105	31,963	364,081
1893	26,555,984	287,094	26,032,428	37,260	126,394	27,375	397,162
1894	34,209,428	359,278	33,461,922	132,370	832,763	1,553	14,753
1895	33,306,906	331,722	30,603,796	405,748	2,630,686	7,120	72,424
1896	37,864,353	372,461	34,560,672	491,565	3,076,384	21,049	227,297
1897	38,185,094	392,190	36,357,451	244,120	1,531,645	28,751	295,998
1898	39,151,873	439,255	37,827,500	199,690	1,213,886	14,411	110,487
1899	31,597,629	389,490	30,516,833	143,286	853,555	33,031	227,241
1900	31,763,443	397,286	30,635,153	125,772	733,477	51,180	394,813
1901	39,738,445	459,218	37,566,980	297,925	1,923,000	22,318	238,465
1902	31,930,602	392,884	29,902,212	358,720	1,940,060	8,368	88,330
1903	30,957,719	402,178	29,848,936	176,961	1,067,860	4,031	40,923
1904	44,264,675	593,409	42,256,291	301,313	1,954,604	6,345	53,780
1905	42,702,061	567,806	40,598,048	268,365	1,687,321	44,496	416,692
1906	43,516,258	584,239	42,081,170	142,690	804,090	59,170	630,998
1907	35,637,074	423,051	34,577,392	135,344	750,242	24,262	309,440

[a] Grease, etc.; lard, lard compounds, lard oil, oleomargarin, oleo oil, other animal oils; pork, cured, bacon; pork, cured—salted or pickled; tallow.

TABLE 5.—*Domestic exports of meat animals and packing-house products, by articles 1890–1907*—Continued.

Year ending June 30—	Value of total packing-house products.	Beef, canned.		Beef, cured: Salted or pickled.		Beef, cured, other.	
		Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
1890	$129,032,914	82,638,507	$6,787,193	97,508,419	$5,250,068	102,110	$9,223
1891	135,024,527	109,585,727	9,068,906	90,286,979	5,048,788	1,621,833	147,518
1892	134,686,604	87,028,084	7,876,454	70,204,736	3,987,829	953,712	92,524
1893	134,096,050	79,089,493	7,222,824	58,423,963	3,185,321	898,920	87,776
1894	143,616,632	55,974,910	5,120,851	62,682,667	3,572,054	1,218,334	100,631
1895	132,996,880	64,102,263	5,720,933	62,473,325	3,558,230	821,673	73,569
1896	133,702,120	63,698,180	5,636,953	70,709,209	3,975,113	514,303	59,371
1897	134,721,096	54,019,772	4,656,308	67,712,940	3,514,126	939,448	83,701
1898	162,494,627	37,109,570	3,279,657	44,314,479	2,368,467	1,589,052	150,051
1899	172,433,625	38,385,472	3,503,293	46,564,876	2,525,784	1,579,313	145,996
1900	179,898,782	55,553,745	5,233,982	47,306,513	2,697,340	2,319,165	197,051
1901	192,485,205	53,445,521	5,307,501	55,312,632	3,145,219	789,285	72,677
1902	196,743,099	66,645,838	6,646,130	48,632,727	3,031,027	818,382	72,836
1903	179,412,354	76,307,114	7,916,928	52,801,220	3,814,671	1,126,032	102,184
1904	177,441,554	57,468,338	5,882,888	57,584,710	3,260,475	269,112	20,542
1905	170,308,231	66,688,568	6,588,958	55,934,705	3,095,304	136,476	14,057
1906	207,673,774	64,523,359	6,430,446	81,088,098	4,697,742	199,483	22,063
1907	203,453,733	15,809,826	1,615,808	62,645,281	3,740,212	1,053,287	107,956

Year ending June 30—	Beef, fresh.		Value of bones, hoofs, horns, and horn tips, strips and waste.	Value of bristles.	Value of canned meat not elsewhere specified.	Value of grease, grease scraps, and other soap stock.	Value of hair.
	Pounds.	Value.					
1890	173,237,596	$12,862,384	$271,533	.....	.....	$1,506,819	$344,558
1891	194,045,638	15,322,054	335,710	.....	.....	2,038,886	394,544
1892	220,554,617	18,053,732	218,639	.....	.....	1,298,598	370,169
1893	206,294,724	17,754,041	319,848	.....	.....	1,067,723	459,648
1894	193,891,824	16,700,163	260,675	$1,844	.....	1,380,299	353,729
1895	191,338,487	16,832,860	288,084	3,901	.....	904,071	505,029
1896	224,783,225	18,974,107	321,680	.....	.....	1,516,763	455,880
1897	290,395,930	22,653,742	280,140	415	.....	2,070,111	517,469
1898	274,768,074	22,966,556	174,861	.....	.....	1,964,565	635,716
1899	282,139,974	23,545,185	195,759	.....	.....	2,576,507	503,712
1900	329,078,609	29,643,820	199,194	1,446	$1,724,064	2,944,322	676,688
1901	351,748,333	31,851,361	218,680	3,968	1,556,671	3,339,948	674,881
1902	301,824,473	29,045,056	163,180	17	1,801,385	2,610,925	633,337
1903	254,795,963	25,013,323	193,817	515	1,831,940	2,926,565	616,133
1904	299,579,671	26,841,586	208,523	1,808	2,254,235	3,311,777	724,514
1905	236,486,568	22,138,365	181,203	1,497	1,974,693	3,710,907	778,471
1906	268,054,227	24,310,058	212,516	329	1,593,497	4,138,333	854,038
1907	281,651,502	26,367,287	172,208	329	745,247	5,473,623	938,433

Year ending June 30—	Hides and skins, other than furs.		Lard.		Lard compounds.		Mutton.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
1890		$1,828,635	471,083,598	$33,455,520	2,520,142	$103,043	256,711	$21,793
1891		1,333,655	498,343,927	34,414,323	1,347,386	62,194	199,395	18,959
1892	(a)	1,223,895	460,045,776	33,201,621	1,350,513	66,476	101,463	9,022
1893		1,497,003	365,693,501	34,643,993	1,205,190	87,540	108,214	9,175
1894		3,972,494	447,566,867	40,089,809	1,343,944	95,922	2,197,900	174,404
1895	36,002,859	2,310,323	474,895,274	36,821,508	540,288	40,279	591,449	47,832
1896	39,545,324	3,858,946	509,534,256	33,589,851	2,378,508	136,568	422,950	31,793
1897	31,119,166	2,388,530	568,315,640	29,126,485	17,650,546	928,242	361,955	28,341
1898	11,536,073	1,015,032	709,344,045	39,710,672	25,330,276	1,307,238	329,169	27,961
1899	10,140,840	929,117	711,259,851	42,208,465	23,318,884	1,256,052	379,110	29,427
1900	7,486,256	804,674	661,813,663	41,939,164	25,852,685	1,475,064	773,760	64,313
1901	11,161,749	1,064,952	611,357,514	46,560,148	23,359,966	1,449,878	691,121	46,643
1902	9,372,747	906,504	556,840,222	52,375,864	36,201,744	2,687,653	430,351	37,067
1903	12,859,549	1,224,409	490,755,821	50,854,504	46,130,004	3,607,542	6,144,020	532,476
1904	32,727,643	3,246,887	561,302,643	46,347,520	53,603,545	3,581,813	465,255	40,618
1905	10,268,722	1,051,641	610,238,899	47,243,181	61,215,187	3,613,235	640,837	52,503
1906	10,752,827	1,223,255	741,516,886	60,132,091	67,621,310	4,154,183	516,345	51,163
1907	15,396,806	1,760,032	627,559,660	57,497,980	80,148,861	6,166,910	822,998	83,874

(a) Not stated.

TABLE 5.—*Domestic exports of meat animals and packing-house products, by articles, 1890–1907*—Continued.

Year ending June 30—	Oil, lard.		Oil, oleo.		Oils, other animal.		Oleomargarin (imitation butter).	
	Gallons.	Value.	Pounds.	Value.	Gallons.	Value.	Pounds.	Value.
1890	1,214,611	$663,343	68,218,098	$6,476,258	727,732	$457,926	2,535,926	$297,264
1891	1,092,448	562,986	80,231,035	7,859,130	512,253	317,594	1,986,743	255,024
1892	907,575	496,601	91,581,703	9,011,889	278,954	144,119	1,610,837	195,587
1893	486,812	336,613	113,939,363	11,207,250	212,266	106,275	3,479,322	416,386
1894	681,081	449,571	123,295,895	11,942,842	270,835	149,801	3,898,950	475,003
1895	553,421	304,093	78,098,878	7,107,018	144,556	75,585	10,100,897	992,464
1896	833,935	426,401	103,276,756	8,087,905	100,934	50,839	6,063,699	587,269
1897	961,407	419,803	113,506,152	6,742,061	112,555	47,836	4,864,351	472,856
1898	775,102	305,825	132,579,277	7,904,413	123,711	50,587	4,328,536	386,297
1899	917,007	412,447	142,390,492	9,183,659	166,372	64,368	5,549,322	509,703
1900	738,724	337,260	146,739,681	10,503,856	381,161	172,568	4,256,067	416,544
1901	766,783	438,645	161,651,413	11,846,373	574,209	258,406	4,990,699	484,501
1902	460,035	327,794	138,546,088	12,254,969	352,201	201,535	5,721,254	601,521
1903	356,658	306,334	126,010,339	11,981,888	221,669	159,505	7,645,652	798,273
1904	376,826	244,499	165,183,839	12,873,558	452,481	273,481	6,137,251	605,874
1905	260,797	154,409	145,228,245	11,485,145	377,777	217,596	7,863,164	711,038
1906	298,103	180,474	209,658,075	17,455,976	338,687	224,991	11,794,174	1,033,256
1907	234,730	144,063	195,337,176	16,819,933	503,234	292,381	5,397,609	520,406

Year ending June 30—	Pork, canned.		Pork, cured, bacon.		Pork, cured, hams.		Pork, cured: Salted or pickled.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
1890			531,899,677	$39,149,635	76,591,279	$7,907,125	79,788,868	$4,753,488
1891			514,675,557	37,404,989	84,410,108	8,245,685	81,317,364	4,787,343
1892			507,919,830	39,334,933	76,856,559	7,757,717	80,336,481	4,792,049
1893			391,758,175	35,781,470	82,178,154	9,933,096	52,459,722	4,116,946
1894			416,657,577	38,338,843	86,970,571	9,845,062	63,575,881	5,067,773
1895			452,549,976	37,776,293	105,494,123	10,960,567	58,266,893	4,138,400
1896			425,352,187	33,442,847	129,036,351	12,669,763	69,498,373	3,973,461
1897			500,399,448	34,187,147	165,247,302	15,970,021	66,768,920	3,297,214
1898			650,108,933	46,380,918	200,185,861	18,987,525	88,133,078	4,906,961
1899			562,651,480	41,557,067	225,846,750	20,774,084	137,197,200	7,917,066
1900	8,496,074	$658,402	512,153,729	38,975,915	196,414,412	20,416,367	133,199,683	8,243,797
1901	8,945,594	708,381	456,122,741	37,499,026	216,571,803	22,842,778	138,643,611	9,926,633
1902	9,603,882	832,910	383,150,624	35,449,797	227,653,232	25,222,744	115,896,275	10,117,562
1903	13,590,897	1,360,687	207,336,000	22,178,525	214,183,365	25,712,633	95,287,374	9,959,762
1904	9,479,312	963,321	249,665,941	24,446,752	194,948,864	22,293,867	112,224,861	9,527,388
1905	10,254,239	993,394	262,246,635	25,428,961	203,458,724	21,562,204	118,887,189	9,412,034
1906	12,699,800	1,215,857	361,210,563	35,845,793	194,267,949	20,075,511	141,820,720	11,681,634
1907	2,710,369	287,460	250,418,699	26,470,972	209,481,496	23,698,207	166,427,409	15,167,058

Year ending June 30—	Pork, fresh.		Sausage and sausage meat.		Value of sausage casings.	Tallow.		Value of other packing-house products.
	Pounds.	Value.	Pounds.	Value.		Pounds.	Value.	
1890	279,463	$15,406			$697,772	112,745,370	$5,242,158	$931,770
1891	818,875	56,358			841,075	111,689,251	5,501,049	1,007,757
1892	377,746	30,246			878,675	89,780,010	4,425,630	1,220,205
1893	912,644	79,317			1,409,280	61,819,153	3,129,059	1,245,466
1894	1,168,647	92,095			1,280,514	54,661,524	2,766,164	1,386,089
1895	818,581	60,660			1,581,891	25,864,300	1,293,059	1,600,231
1896	744,656	43,739			1,771,680	52,759,212	2,323,764	1,767,437
1897	1,306,424	94,816			1,514,651	75,108,834	2,782,595	2,944,486
1898	12,224,285	815,075			1,821,519	81,744,809	3,141,653	4,193,078
1899	41,310,364	2,722,661			1,671,052	107,361,009	4,367,356	5,834,865
1900	25,946,905	1,925,772			2,307,571	89,030,943	4,398,204	3,941,394
1901	30,728,586	2,424,537	9,799,106	$923,974	2,778,854	77,166,889	3,848,561	3,212,009
1902	44,171,674	3,652,464	7,137,297	726,437	1,795,044	34,065,758	1,924,577	3,624,764
1903	20,966,113	2,035,491	5,264,648	585,088	1,964,524	27,368,924	1,623,852	2,101,785
1904	18,633,820	1,669,818	5,562,349	602,528	2,353,167	76,924,174	3,801,302	2,062,813
1905	14,946,284	1,291,794	6,061,508	671,241	2,646,868	63,536,992	3,022,173	2,267,359
1906	13,444,438	1,261,412	7,926,786	881,686	2,572,479	97,567,156	4,791,025	2,633,986
1907	11,467,779	1,143,886	8,000,964	925,877	3,422,271	127,857,739	7,182,688	2,708,632

GENERAL TENDENCY OF EXPORTS, 1878–1882 TO 1903–1906.

LARGEST AVERAGE QUANTITY 2,209,000,000 POUNDS.

In order that annual fluctuations in exports may be excluded from attention and the general tendency may be discovered, a process of averaging exports in five-year periods, beginning with 1878–1882, has been adopted with results that appear in Table 6. The last period, however, 1903–1906, contains but four years and the exports of 1907 stand separately for a more distinct comparison.

As a result of averaging, it appears that from 1878–1882 to 1903–1906 cattle exports increased in a considerable degree, or from 139,000 in number to 537,000. Swine exports decreased from 60,000 to 29,000, and sheep exports were about 225,000, except that the average number was 186,000 annually during 1878–1882 and 90,000 during 1888–1892.

It will be observed upon examining Table 6 that fresh beef and pork increase in exports to 1898–1902 and afterwards decline; that salted or pickled beef, notwithstanding fluctuations, has maintained its position; and that salted or pickled pork has made a distinct gain.

Fluctuations can not obscure the fact that bacon has been losing its old-time position in exports, but hams have distinctly gained. On the whole, canned beef may be regarded as gaining in exports from 1887 to 1903–1906. Lard gained steadily in prominence from 1883–1887 to 1898–1902, but lost 50,000,000 pounds of its exports in each of the succeeding four years on the average. A distinct gain appears in the case of oleomargarin exports.

As far as the exports of meat and its products are expressed in quantities, Table 6 is a complete statement. The reported number of pounds of exported meat and meat products was 1,340,000,000 as an annual mean for 1878–1882, and the highest amount ever reached was 2,209,000,000 pounds, as the yearly mean for 1898–1902, from which the quantity declined to 1,903,000,000 pounds in 1903–1906. These numbers stand for about nine-tenths of the exports, the unexpressed one-tenth being reported only for value.

TABLE 6.—*Domestic exports of meat animals and some packing-house products—annual means for 1878–1882 to 1903–1906.*

Article.	Annual mean for years ending June 30—			
	1878–1882	1883–1887	1888–1892	1893–1897
	Number.	*Number.*	*Number.*	*Number.*
Cattle	138,667	131,275	302,023	348,549
Sheep	185,681	228,986	89,619	262,213
Swine	60,324	53,421	57,530	17,172
	Gallons.	*Gallons.*	*Gallons.*	*Gallons.*
Oil, lard	1,272,326	791,290	1,001,311	703,331
Oils, other animal	67,300	253,804	538,951	168,229
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
Beef, canned	[a]	[b] 43,050,588	74,147,189	63,376,924
Beef, cured: Other than salted or pickled	[a]	[c] 557,684	590,968	878,536
Beef, cured: Salted or pickled	41,523,560	45,478,961	72,397,360	64,400,421
Beef, fresh	73,676,215	100,122,701	163,846,203	221,340,838
Lard	334,582,892	277,658,259	409,091,260	473,201,108
Lard compounds	[a]	[a]	[a]	4,081,917
Mutton	1,732,034	1,975,516	215,705	736,494
Oil, oleo	16,054,398	35,475,862	59,655,993	106,423,409
Oleomargarin	[d] 2,157,446	1,202,510	2,010,976	5,681,444
Pork, canned	[a]	[a]	[a]	[a]

[a] No data. [b] Year 1887. [c] Mean for 1884–1887. [d] Year 1882.

TABLE 6.—*Domestic exports of meat animals and some packing-house products—annual means for 1878–1882 to 1903–1906*—Continued.

Article.	Annual mean for years ending June 30—			
	1878–1882	1883–1887	1888–1892	1893–1897
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
Pork, cured: Bacon	637,318,576	343,092,696	448,635,833	437,343,473
Pork, cured: Hams	[a] 56,607,671	50,826,685	64,967,635	113,785,300
Pork, cured: Salted or pickled	88,123,253	73,439,063	72,878,105	62,113,958
Pork, fresh	[b]	[c] 176,050	312,413	990,190
Sausage and sausage meats	[b]	[b]	[b]	[b]
Tallow	88,622,976	51,206,255	96,908,448	54,042,605
Total pounds	1,340,399,021	1,024,362,830	1,465,658,188	1,608,396,617

Article.	Annual mean for years ending June 30—		Year ending June 30, 1907. (Preliminary.)
	1898–1902	1903–1906	
	Number.	*Number.*	*Number.*
Cattle	415,627	536,908	423,051
Sheep	225,079	222,332	135,344
Swine	25,862	28,510	24,262
	Gallons.	*Gallons.*	*Gallons.*
Oil, lard	731,530	323,096	234,730
Oils, other animal	319,531	347,654	503,234
	Pounds.	*Pounds.*	*Pounds.*
Beef, canned	50,228,029	66,246,845	15,809,826
Beef, cured: Other than salted or pickled	1,419,039	432,776	1,053,287
Beef, cured: Salted or pickled	48,426,245	61,852,183	62,645,281
Beef, fresh	207,911,893	264,729,107	281,651,502
Lard	650,123,059	600,953,562	627,559,660
Lard compounds	25,780,428	56,992,512	80,148,861
Mutton	520,702	1,941,614	822,998
Oil, oleo	144,381,390	161,520,124	195,337,176
Oleomargarin	4,969,176	8,360,060	5,397,609
Pork, canned	[d] 9,015,183	11,506,062	2,710,369
Pork, cured: Bacon	512,837,501	270,114,785	250,418,699
Pork, cured: Hams	213,334,412	201,714,726	209,481,496
Pork, cured: Salted, or pickled	122,613,969	117,055,026	166,427,409
Pork, fresh	30,876,363	16,997,664	11,467,779
Sausage and sausage meats	[e] 8,468,202	6,203,823	8,000,964
Tallow	77,873,882	66,349,312	127,857,739
Total pounds	2,208,779,473	1,912,970,191	2,046,790,655

[a] Mean for 1881 and 1882.
[b] No data.
[c] Mean for 1884–1887.
[d] Mean for 1900–1902.
[e] Mean for 1901 and 1902.

EXPORTS OF 1907.

PERCEPTIBLE ADVANCES.

The exports of 1907 made perceptible advances over the averages of 1903–1906, in the items of cured beef other than salted or pickled, fresh beef, lard, lard compounds, oleo oil, cured pork hams, salted or pickled pork, sausage and sausage meats, and tallow, so that in spite of declines in exports of canned beef, cured bacon, mutton, oleomargarin, canned pork, and fresh pork, the exported meat and meat products exceeded the average of 1903–1906 by 134,000,000 pounds and reached a total of 2,047,000,000 pounds. Yet this was 162,000,000 pounds under the average of 1898–1902.

COUNTRIES TO WHICH MEAT IS SENT.

FEATURES OF SPECIALIZED TRADE.

For 12 principal countries to which the surplus meat of the United States is exported, Table 7 has been prepared to exhibit for seventeen years, 1890–1906, the quantity and value of the exports of live meat animals, of meat and meat products, and of nonedible products of the packing-house. These countries are Austria-Hungary, Belgium, British West Indies, Canada, Cuba, Denmark, France, Germany, Italy, the Netherlands, Norway and Sweden (combined), and the United Kingdom.

In this table the trend of exports to each of the foregoing countries appears from the beginning to the end of the period, and for each country is disclosed the commodity or class of commodities more especially preferred, or not barred out by restrictions, or finding entrance in spite of restrictions, or effectively excluded.

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906.*

Country and year ending June 30—	Value of total domestic merchandise.	Value of total farm products.	Value of total meat animals and packing-house products.	Value of total packing-house fats and oils and fat meats.[a]
Total, all countries:				
1890	$845,293,828	$634,855,869	$161,446,164	$92,002,411
1891	872,270,283	652,407,931	166,877,515	93,141,324
1892	1,015,732,011	803,122,045	170,310,885	92,901,027
1893	831,030,785	621,201,671	160,652,034	90,878,586
1894	869,204,937	636,633,747	177,926,070	100,738,089
1895	793,392,599	558,385,861	166,303,786	89,450,613
1896	863,200,487	574,398,264	171,566,483	84,101,379
1897	1,032,007,603	689,755,193	172,906,190	80,003,816
1898	1,210,291,913	859,018,946	201,646,500	105,870,550
1899	1,203,931,222	792,811,733	204,031,254	109,996,869
1900	1,370,763,571	844,616,530	211,662,225	109,406,694
1901	1,460,462,806	951,628,331	232,223,650	115,652,119
1902	1,355,481,861	857,113,533	228,673,701	118,552,197
1903	1,392,231,302	878,480,557	210,370,073	104,396,750
1904	1,435,179,017	859,160,264	221,706,229	105,013,964
1905	1,491,744,641	826,904,777	213,010,292	104,998,679
1906	1,717,953,382	975,108,599	251,190,032	139,637,756
Austria-Hungary:				
1890	945,703	536,447	9,258	8,958
1891	1,215,540	231,681	11,828	7,642
1892	1,485,233	1,060,687	17,545	9,941
1893	542,073	130,117	18,243	.....
1894	526,721	186,172	1,665	.....
1895	2,059,742	1,233,671	13,525	.....
1896	2,370,901	1,203,670	83,564	65,590
1897	3,759,700	1,918,877	365,413	351,839
1898	5,469,853	3,875,774	1,238,841	1,205,738
1899	7,148,419	4,548,249	1,450,501	1,431,589
1900	6,826,972	3,508,037	204,707	195,916
1901	6,963,299	3,308,120	206,715	201,063
1902	5,913,462	2,794,421	60,740	53,738
1903	6,973,513	3,719,758	162,525	149,659
1904	8,137,670	3,882,874	546,821	394,105
1905	11,460,943	6,013,131	1,158,200	1,084,569
1906	14,764,131	8,083,283	2,805,000	2,675,816
Belgium:				
1890	26,140,377	21,493,741	7,445,545	6,015,274
1891	26,694,150	21,641,653	8,421,351	6,444,474
1892	47,713,121	42,984,613	7,183,990	6,059,513
1893	25,859,728	20,733,573	5,710,018	4,969,288
1894	26,928,669	21,801,091	6,058,580	5,305,014
1895	24,880,835	19,542,925	7,411,431	6,338,037
1896	26,391,925	18,469,838	5,731,227	3,537,706

[a] Grease, etc.; lard, lard compounds, lard oil, oleomargarin, oleo oil, other animal oils; pork, cured bacon; pork, cured, salted, or pickled; tallow.

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Value of total domestic merchandise.	Value of total farm products.	Value of total meat animals and packing-house products.	Value of total packing-house fats and oils and fat meats.
Belgium—Continued.				
1897	$32,600,024	$22,187,935	$5,391,782	$3,275,071
1898	47,466,600	36,673,588	7,575,277	5,423,632
1899	43,866,076	33,588,538	7,135,769	5,161,621
1900	47,756,286	32,698,049	5,993,059	4,506,784
1901	48,552,762	35,341,110	6,441,543	5,225,888
1902	45,772,273	33,810,688	7,016,349	5,846,425
1903	46,572,016	33,466,678	5,578,136	4,496,860
1904	40,058,490	26,974,970	7,575,406	4,568,146
1905	37,447,369	24,497,222	6,317,369	4,446,609
1906	49,208,063	34,606,363	9,121,634	6,921,500
British West Indies:				
1890	8,074,433	5,460,553	1,342,727	797,525
1891	9,546,058	6,562,367	1,342,688	782,293
1892	7,995,185	5,631,647	1,275,803	878,455
1893	7,912,341	5,424,280	1,454,932	1,061,277
1894	8,387,220	5,591,235	1,678,599	1,184,546
1895	7,667,561	4,828,128	1,310,506	904,386
1896	8,566,965	5,374,237	1,443,062	1,026,475
1897	7,808,493	4,774,168	1,086,231	695,963
1898	8,235,678	5,531,515	1,238,606	807,831
1899	8,618,024	4,946,827	1,287,578	857,490
1900	8,796,583	5,223,796	1,279,357	765,988
1901	8,765,230	5,135,848	1,367,160	900,562
1902	9,581,041	5,525,810	1,456,094	893,660
1903	10,031,496	5,691,212	1,634,493	1,025,164
1904	9,460,069	5,837,554	1,511,124	915,445
1905	9,922,049	6,055,222	1,347,857	758,059
1906	9,616,665	5,765,046	1,442,659	785,779
Canada:				
1890	37,327,963	21,674,543	4,547,331	2,613,122
1891	36,052,613	18,750,084	4,143,510	2,542,877
1892	41,006,120	23,601,409	3,890,998	2,242,586
1893	43,026,846	17,683,829	2,164,222	1,054,165
1894	50,040,870	21,067,060	3,668,287	1,962,358
1895	47,787,501	19,181,508	3,218,143	1,320,584
1896	53,063,247	20,357,400	4,002,323	1,880,787
1897	58,465,048	22,192,126	3,641,414	1,417,849
1898	77,450,465	32,339,827	5,092,472	2,508,249
1899	81,010,379	30,784,135	3,582,130	1,943,055
1900	88,030,336	21,455,192	2,301,972	848,244
1901	97,722,458	27,550,201	3,709,624	1,415,801
1902	101,696,372	27,915,718	4,130,547	1,658,455
1903	114,480,138	29,969,374	3,115,078	1,734,743
1904	122,234,039	25,593,353	5,731,399	1,708,256
1905	131,343,280	23,865,106	3,275,905	1,151,732
1906	146,175,015	30,411,931	4,535,204	2,288,859
Cuba:				
1890	12,669,509	4,894,381	2,888,141	2,598,529
1891	11,929,605	4,149,043	2,776,793	2,506,034
1892	17,622,411	7,400,811	4,180,643	3,550,030
1893	23,604,094	9,565,300	5,603,004	4,699,410
1894	19,855,237	9,513,304	5,082,666	4,308,081
1895	12,533,260	5,568,738	3,217,605	2,697,712
1896	7,312,348	3,974,875	2,398,090	1,982,167
1897	7,599,757	4,678,492	2,345,005	1,881,666
1898	9,233,894	6,763,971	3,330,312	1,750,434
1899	17,247,952	10,449,706	4,926,678	2,232,079
1900	25,236,808	13,582,837	7,064.492	3,508,436
1901	24,100,453	12,623,933	6,605,652	4,098,733
1902	25,012,109	12,935,115	6,704,203	4,140,110
1903	20,140,132	10,134,895	5,620,425	3,689,375
1904	25,810,812	12,380,587	6,555,084	3,639,413
1905	36,407,932	16,386,288	6,882,707	4,043,507
1906	46,377,277	18,076,980	7,769,614	4,852,192
Denmark:				
1890	5,037,290	4,318,527	1,142,401	1,091,123
1891	3,306,357	2,471,869	1,518,726	1,329,260
1892	8,358,881	7,618,267	1,444,392	1,394,170
1893	5,266,915	4,214,315	1,168,665	1,110,393
1894	5,046,192	4,215,159	1,209,890	1,154,967
1895	3,430,202	2,209,790	885,422	820,926
1896	6,534,393	5,045,647	795,981	747,280
1897	10,189,453	8,207,250	523,607	480,435
1898	12,680,619	10,276,915	995,541	926,363
1899	16,594,809	12,872,848	1,332,799	1,143,024
1900	18,469,177	14,752,259	1,622,358	1,536,846
1901	16,148,968	13,172,332	2,088,246	1,978,457

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Value of total domestic merchandise.	Value of total farm products.	Value of total meat animals and packing-house products.	Value of total packing-house fats and oils and fat meats.
Denmark—Continued.				
1902	$15,439,972	$12,497,721	$2,583,860	$2,457,050
1903	16,135,091	13,409,814	2,037,927	1,857,923
1904	14,016,630	10,434,875	1,700,840	1,439,490
1905	14,843,216	11,885,508	1,778,774	1,572,487
1906	22,902,135	19,405,173	3,089,886	2,691,927
France:				
1890	49,013,004	39,750,522	4,574,404	3,669,669
1891	59,826,739	50,823,947	6,330,976	4,950,026
1892	97,896,132	87,450,446	5,290,397	3,805,616
1893	46,006,448	34,681,344	2,893,734	2,185,353
1894	52,888,224	41,911,888	5,036,643	3,294,996
1895	44,009,786	32,842,472	5,615,300	3,560,173
1896	45,352,724	31,000,013	4,897,452	3,050,375
1897	55,387,631	38,862,483	4,112,422	3,186,171
1898	93,790,717	75,351,247	3,070,062	2,459,201
1899	59,069,112	38,062,305	4,532,300	3,877,959
1900	81,993,909	45,204,807	4,230,094	3,406,143
1901	76,431,378	50,208,775	2,977,144	2,364,065
1902	69,244,213	45,787,844	2,028,261	1,449,090
1903	75,092,466	50,408,621	1,917,553	1,434,460
1904	83,207,554	55,894,652	2,273,294	1,560,778
1905	74,413,272	45,962,298	1,508,348	1,109,483
1906	96,453,755	62,346,751	2,378,797	1,840,183
Germany:				
1890	84,315,215	67,062,506	11,325,649	9,743,704
1891	91,684,981	72,115,088	12,214,420	9,939,702
1892	104,180,732	85,949,647	14,061,357	11,835,792
1893	81,992,572	59,752,318	12,263,362	10,051,057
1894	90,065,108	72,984,382	15,684,833	13,106,660
1895	90,615,551	72,328,146	14,466,998	11,358,599
1896	96,364,368	71,714,855	14,012,647	10,801,428
1897	123,784,453	95,148,266	14,986,103	12,088,510
1898	153,171,100	119,808,800	23,593,552	19,553,793
1899	153,265,513	113,352,971	24,431,953	20,481,154
1900	184,648,094	134,009,352	21,349,725	18,251,821
1901	188,350,919	144,802,269	22,647,689	19,722,965
1902	170,222,737	131,895,678	24,510,367	21,908,424
1903	190,896,447	151,058,387	23,210,630	20,646,736
1904	212,367,144	164,160,436	22,328,023	19,934,133
1905	191,271,367	139,961,569	21,927,597	19,272,976
1906	232,403,778	170,943,186	30,066,304	26,052,788
Italy:				
1890	12,974,249	9,910,792	405,931	372,398
1891	15,927,274	9,728,519	583,941	537,077
1892	14,223,947	11,741,663	346,938	308,696
1893	12,792,059	10,118,252	309,156	198,646
1894	13,808,241	10,826,895	374,923	164,746
1895	16,241,595	12,613,752	199,430	49,605
1896	19,040,558	14,519,080	257,646	127,474
1897	21,377,761	15,729,870	432,860	325,892
1898	23,067,997	17,646,024	653,154	609,227
1899	24,892,037	18,106,749	1,633,871	1,546,678
1900	33,059,005	24,303,896	1,324,308	1,252,120
1901	34,277,491	24,762,081	1,053,374	954,331
1902	30,888,503	23,548,106	797,498	742,235
1903	34,692,263	26,927,710	1,214,664	991,705
1904	35,434,448	27,047,272	1,602,480	1,308,870
1905	38,429,738	28,310,247	1,103,080	999,835
1906	47,362,491	33,726,559	1,200,076	1,120,657
Netherlands:				
1890	22,487,588	17,111,606	8,604,832	8,151,258
1891	23,816,814	17,241,054	10,174,743	9,394,233
1892	43,556,865	35,771,137	12,031,831	11,243,357
1893	38,118,527	30,177,399	11,792,768	10,951,190
1894	43,087,706	32,856,875	12,942,572	12,216,231
1895	30,256,108	20,494,200	8,712,044	7,705,346
1896	38,092,901	21,145,723	9,322,044	8,300,395
1897	50,362,116	27,718,660	9,779,630	8,596,571
1898	63,417,547	41,806,137	12,264,960	10,833,083
1899	78,727,644	53,156,059	13,589,520	11,857,411
1900	89,116,242	52,292,647	14,147,887	12,479,432
1901	83,847,330	50,999,414	13,304,375	11,948,264
1902	74,693,862	47,620,945	14,083,648	13,049,292
1903	77,746,079	48,294,776	13,088,135	12,142,781
1904	71,858,185	36,705,357	16,361,435	14,801,967
1905	72,728,213	33,362 823	13,877,456	12,769,403
1906	95,197,392	49,741,939	19,793,818	18,329,327

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Value of total domestic merchandise.	Value of total farm products.	Value of total meat animals and packing-house products.	Value of total packing-house fats and oils and fat meats.
Norway and Sweden:				
1890	$3,555,633	$1,691,298	$680,403	$544,510
1891	4,939,572	3,061,945	1,139,735	856,243
1892	6,578,857	4,917,338	658,649	566,571
1893	4,083,156	2,143,148	650,477	528,304
1894	4,355,777	2,899,761	1,040,723	882,869
1895	4,648,086	2,418,606	780,549	662,897
1896	5,019,486	2,915,334	1,162,965	1,018,631
1897	5,463,534	2,126,804	1,072,926	937,286
1898	6,311,393	3,069,676	1,127,426	1,039,404
1899	12,204,947	7,981,427	4,270,007	3,901,377
1900	10,432,597	5,515,294	3,192,120	2,934,225
1901	11,838,911	7,085,905	4,435,837	4,091,660
1902	10,103,330	5,975,362	3,388,663	3,051,016
1903	10,071,565	6,295,586	2,748,564	2,506,557
1904	11,325,383	6,438,531	3,578,348	3,183,419
1905	11,615,604	6,998,651	3,130,726	2,857,814
1906	13,447,077	8,692,256	4,587,966	4,154,754
United Kingdom:				
1890	444,459,009	382,181,199	109,104,296	49,524,504
1891	441,599,807	380,908,280	108,445,093	46,651,889
1892	493,957,868	431,774,265	111,366,510	44,709,683
1893	414,966,094	345,980,021	107,561,924	47,394,973
1894	423,968,879	356,006,251	114,404,135	48,609,594
1895	384,132,970	314,971,967	109,835,414	45,807,971
1896	401,145,205	320,842,742	117,657,859	44,293,278
1897	478,448,592	381,622,439	120,470,539	40,823,148
1898	534,398,302	438,611,588	133,288,088	53,181,706
1899	505,668,925	398,261,403	126,598,014	49,233,005
1900	527,784,340	407,675,688	137,870,001	52,792,418
1901	624,216,404	496,401,947	156,373,020	55,635,948
1902	542,001,128	416,768,519	150,494,691	56,370,194
1903	516,986,416	396,346,090	135,100,720	47,379,093
1904	530,492,224	400,307,826	140,981,208	45,413,840
1905	518,105,398	389,031,906	138,713,120	48,962,003
1906	578,023,505	440,260,575	150,936,244	60,130,347

Country and year ending June 30—	Total value of cattle, sheep, and swine.	Cattle.		Sheep.		Swine.	
		Number.	Value.	Number.	Value.	Number.	Value.
Total, all countries:							
1890	$32,413,250	394,836	$31,261,131	67,521	$243,077	91,148	$909,042
1891	31,852,988	374,679	30,445,249	60,947	261,109	95,654	1,146,630
1892	35,624,281	394,607	35,099,095	46,960	161,105	31,963	364,081
1893	26,555,984	287,094	26,032,428	37,260	126,394	27,375	387,162
1894	34,300,438	359,278	33,461,922	132,370	832,763	1,553	14,753
1895	33,305,906	331,722	30,603,796	405,748	2,630,686	7,130	72,424
1896	37,334,353	372,461	34,560,672	491,565	3,076,384	21,049	227,297
1897	38,185,094	392,190	36,357,451	244,120	1,531,645	28,751	295,998
1898	39,151,873	439,255	37,827,500	199,690	1,213,886	14,411	110,487
1899	31,597,629	389,490	30,516,833	143,286	853,555	33,031	227,241
1900	31,763,443	397,286	30,635,153	125,772	733,477	51,180	394,813
1901	39,738,445	459,218	37,566,980	297,925	1,933,000	22,318	238,465
1902	31,930,602	392,884	29,902,212	358,720	1,940,060	8,368	88,330
1903	30,957,719	402,178	29,848,936	176,961	1,067,860	4,031	40,923
1904	44,264,675	593,409	42,256,291	301,313	1,954,604	6,345	53,780
1905	42,702,061	567,806	40,598,048	268,365	1,687,321	44,496	416,692
1906	43,516,258	584,239	42,081,170	142,690	804,090	59,170	630,998
Austria-Hungary: [a]							
1897	245					9	245
Belgium:							
1890	562,825	7,263	562,825				
1891	563,290	7,303	563,290				
1892	264,275	3,423	264,275				
1893	129,190	1,440	129,190				
1894	125,060	1,377	125,060				
1895	395,825	4,262	365,400	4,061	30,425		
1896	305,213	1,411	122,450	22,293	182,763		
1897	133,506	1,086	99,100	3,751	34,406		
1898							
1899							
1900							
1901	27,120	230	23,000	440	4,120		

[a] No exports in 1890–1906, except those given.

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Total value of cattle, sheep, and swine.	Cattle.		Sheep.		Swine.	
		Number.	Value.	Number.	Value.	Number.	Value.
Belgium—Continued.							
1902	$83,600	826	$82,600	200	$1,000	.....	.....
1903	188,697	1,824	186,303	298	2,394	.....	.....
1904	1,858,122	18,350	1,768,860	9,809	77,662	1,450	$11,600
1905	720,837	7,301	703,681	2,074	17,156	.....	.....
1906	918,620	9,516	918,620	.....	.....	.....	.....
British West Indies:							
1890	161,622	1,761	137,920	2,695	23,607	8	95
1891	169,761	1,767	144,730	2,840	24,922	9	109
1892	22,532	161	10,306	1,365	12,116	12	110
1893	21,603	189	11,071	1,264	10,444	7	88
1894	21,871	207	13,606	1,196	8,158	9	107
1895	19,314	102	8,032	1,626	11,116	9	166
1896	23,784	106	6,073	2,581	16,936	21	775
1897	39,411	206	14,404	3,277	25,007	.....	.....
1898	43,343	270	21,899	2,853	21,267	9	177
1899	31,401	244	16,994	1,762	14,277	9	130
1900	23,565	177	12,355	1,375	11,184	1	26
1901	20,949	141	9,317	1,478	11,552	4	80
1902	77,330	1,331	62,844	1,791	14,382	6	104
1903	63,799	1,060	53,889	1,184	9,856	2	54
1904	55,738	853	43,178	1,649	12,530	3	30
1905	67,029	1,186	58,208	1,165	8,821	.....	.....
1906	34,505	572	29,205	665	5,018	22	282
Canada:							
1890	500,672	474	36,257	31,050	73,776	49,961	390,639
1891	369,323	640	19,058	34,796	83,818	33,639	266,447
1892	254,234	2,123	44,805	35,886	79,297	14,331	130,132
1893	105,368	1,385	22,241	31,659	79,584	435	3,543
1894	148,472	537	12,489	42,550	133,090	323	2,893
1895	171,509	530	9,694	53,810	158,600	698	3,215
1896	315,740	2,701	166,914	59,588	142,472	1,864	6,354
1897	567,272	6,812	459,036	48,437	90,353	3,768	17,883
1898	1,201,525	15,804	1,068,139	48,325	108,446	4,039	24,940
1899	303,207	3,709	221,037	34,782	75,323	1,363	6,847
1900	412,070	5,233	306,645	43,535	98,403	977	7,022
1901	835,473	13,333	605,907	69,669	216,680	1,427	12,886
1902	1,120,521	18,780	719,761	146,503	383,225	2,352	17,535
1903	1,417,759	35,583	1,231,714	54,371	174,437	1,318	11,608
1904	1,694,943	38,080	1,492,248	60,213	187,742	1,971	14,953
1905	938,256	21,056	435,212	68,611	202,332	32,906	300,712
1906	1,071,854	15,633	453,350	68,951	212,450	39,997	406,054
Cuba:							
1890	245	3	225	2	20	.....	.....
1891	1,095	10	570	.....	.....	50	525
1892	298	3	270	.....	.....	3	28
1893	275	1	125	.....	.....	11	150
1894	326	4	175	12	78	9	73
1895	549	5	360	.....	.....	9	189
1896	780	.....	.....	59	380	25	400
1897	5,265	95	5,265	.....	.....	.....	.....
1898	1,096,945	40,186	1,085,299	57	537	1,426	11,109
1899	1,903,248	72,890	1,802,149	2,009	5,653	17,908	95,446
1900	2,347,448	83,649	2,042,710	1,236	5,115	42,644	299,623
1901	1,455,662	63,392	1,261,027	467	3,887	17,851	190,748
1902	1,487,086	78,023	1,441,840	291	3,223	3,826	42,023
1903	1,181,663	70,812	1,168,382	258	2,238	851	11,013
1904	2,180,024	134,781	2,166,485	141	648	1,482	12,891
1905	2,096,266	135,421	2,062,483	128	938	4,572	32,845
1906	2,023,876	130,639	1,977,088	168	835	5,358	45,953
Denmark: [a]							
1906	29,280	332	29,980	.....	.....	.....	.....
France:							
1890	33,210	369	33,210	.....	.....	.....	.....
1891	456,142	5,885	445,970	1,580	10,172	.....	.....
1892	74,763	845	74,763	.....	.....	.....	.....
1893	.....	.....	.....	.....	.....	.....	.....
1894	450,000	5,184	450,000	.....	.....	.....	.....
1895	879,936	10,538	840,000	5,211	39,936	.....	.....
1896	27,590	.....	.....	3,310	27,590	.....	.....
1897	.....	.....	.....	.....	.....	.....	.....
1898	.....	.....	.....	.....	.....	.....	.....
1899	1,960	.....	.....	.....	.....	98	1,960
1900	.....	.....	.....	.....	.....	.....	.....
1901	.....	.....	.....	.....	.....	.....	.....

[a] No exports in 1890–1906, except those given.

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Total value of cattle, sheep, and swine.	Cattle.		Sheep.		Swine.	
		Number.	Value.	Number.	Value.	Number.	Value.
France—Continued.							
1902							
1903	$1,980			198	$1,980		
1904							
Germany:							
1905							
1906							
1890	335,540	3,977	$335,540				
1891	427,565	5,223	427,565				
1892	448,480	4,643	448,480				
1893	41,800	419	41,800				
1894	286,050	3,069	285,792			10	$258
1895	621,920	6,436	621,920				
1896							
1897	55,525	633	55,525				
1898	50			1	50		
1899							
1900	50,000	500	50,000				
1901	3,220	46	3,220				
1902							
1903							
1904							
1905							
1906							
Italy: [a]							
1900	85					10	85
Netherlands:							
1890							
1891							
1892							
1893							
1894	48,800	488	48,800				
1895	41,440	518	41,440				
1896	69,200	742	69,200				
1897	178,500	1,929	178,500				
1898							
1899							
1900							
1901	31,050	345	31,050				
1902							
1903							
1904							
1905							
1906							
Norway and Sweden: [a]							
1890	25,650	342	25,650				
United Kingdom:							
1890	29,817,600	360,589	29,767,461	4,927	39,039	1,102	11,100
1891	28,727,100	345,797	28,622,275	10,946	104,825		
1892	34,116,858	378,167	34,074,846	3,584	34,112	1,044	7,900
1893	25,696,515	280,996	25,665,155	58	8,000	2,062	23,360
1894	32,998,370	345,734	32,345,235	79,786	653,135		
1895	30,841,780	305,068	28,492,424	335,882	2,348,816	60	540
1896	36,638,533	364,193	33,984,943	397,280	2,647,640	500	5,950
1897	36,690,965	378,459	35,374,322	180,304	1,316,104	66	539
1898	36,456,346	378,956	35,431,464	142,178	1,01 ,895	1,030	7,987
1899	28,916,044	308,126	28,213,572	98,080	702,347	20	125
1900	28,495,933	302,195	27,935,747	73,126	560,166	2	20
1901	36,967,898	376,380	35,311,949	219,426	1,655,949		
1902	28,590,728	284,999	27,114,151	203,880	1,476,577		
1903	27,407,172	277,226	26,597,390	111,688	809,782		
1904	37,709,669	387,467	36,110,806	223,057	1,598,863		
1905	38,099,376	391,715	36,722,387	185,105	1,373,683	350	3,306
1906	38,222,472	405,277	37,729,300	65,318	486,252	692	6,920

[a] No exports in 1890–1906, except those given.

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Value of total packing-house products.	Beef, canned.		Beef, cured: Salted or pickled.		Beef, fresh.	
		Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Total, all countries:							
1890	$129,032,914	82,638,507	$6,787,193	97,508,419	$5,250,068	173,237,596	$12,862,384
1891	135,024,527	109,585,727	9,068,906	90,286,979	5,048,788	194,045,638	15,322,054
1892	134,686,604	87,028,084	7,876,454	70,204,736	3,987,829	220,554,617	18,053,732
1893	134,096,050	79,089,493	7,222,824	58,423,963	3,185,321	206,294,724	17,754,041
1894	143,616,632	55,974,910	5,120,851	62,682,667	3,572,054	193,891,824	16,700,163
1895	132,996,880	64,102,263	5,720,933	62,473,325	3,558,230	191,338,487	16,832,860
1896	133,702,130	63,698,180	5,636,953	70,709,209	3,975,113	224,783,225	18,974,107
1897	134,721,096	54,019,772	4,656,308	67,712,940	3,514,126	290,395,950	22,653,742
1898	162,494,627	37,109,570	3,279,657	44,314,479	2,368,467	274,768,074	22,966,556
1899	172,433,625	38,385,472	3,503,293	46,564,876	2,525,784	282,139,974	23,545,185
1900	179,898,782	55,553,745	5,233,982	47,306,513	2,697,340	329,078,609	29,643,850
1901	192,485,205	53,445,521	5,307,501	55,312,632	3,145,219	351,748,553	31,851,561
1902	196,743,099	66,645,858	6,646,130	48,632,727	3,031,027	301,824,473	29,045,056
1903	179,412,354	76,307,114	7,916,928	52,801,220	3,814,671	254,795,963	25,013,323
1904	177,441,554	57,468,338	5,882,888	57,584,710	3,260,475	299,579,671	26,841,586
1905	170,308,231	66,688,568	6,588,958	55,934,705	3,095,304	236,486,568	22,138,365
1906	207,673,774	64,523,359	6,450,446	81,088,098	4,697,742	268,054,227	24,310,058
Austria-Hungary:							
1890	9,258						
1891	11,828	17,900	1,425	67,800	2,761		
1892	17,545			3,000	200		
1893	18,243			32,500	2,055		
1894	1,665			24,000	1,040		
1895	13,525			32,000	1,375		
1896	83,564			95,600	5,005		
1897	365,168	1,800	137	68,000	2,736		
1898	1,238,841	3,900	389	115,600	6,010		
1899	1,450,501	9,994	818	72,000	3,358		
1900	204,707	11,652	1,169	64,000	3,259		
1901	206,715	2,782	280	76,000	3,570		
1902	60,740	5,700	570	59,000	3,027		
1903	162,525	15,090	1,260	30,000	1,995		
1904	546,821	1,008	106	69,200	3,840		
1905	1,158,200	118,265	14,267	60,600	2,925		
1906	2,805,000	766,431	75,449	108,600	5,922		
Belgium:							
1890	6,882,720	775,425	66,713	2,092,835	105,580	2,400	130
1891	7,858,061	4,859,358	408,501	1,950,500	113,665		
1892	6,919,715	960,611	77,824	1,075,646	57,161		
1893	5,580,828	1,184,500	100,052	593,212	32,817		
1894	5,933,520	975,935	82,962	1,028,720	61,164		
1895	7,015,606	1,287,830	109,654	1,035,340	62,504		
1896	5,426,014	1,389,930	111,164	3,132,939	202,513		
1897	5,258,276	1,152,153	95,138	2,888,839	151,255		
1898	7,575,277	796,126	70,826	2,528,900	121,631		
1899	7,135,769	305,233	27,413	1,866,050	92,785		
1900	5,993,059	435,444	42,184	2,109,875	110,928		
1901	6,414,423	573,003	56,584	1,659,700	93,093		
1902	6,932,749	329,787	32,201	1,460,090	89,534		
1903	5,389,439	518,832	52,610	1,605,400	110,178		
1904	5,717,284	598,378	58,730	2,512,682	138,365		
1905	5,596,532	475,300	49,134	2,552,010	137,451	24,830	2,231
1906	8,203,014	1,465,671	155,017	3,231,398	171,748		
British West Indies:							
1890	1,181,105	201,520	16,455	4,069,802	215,687	277	34
1891	1,172,927	281,859	23,802	4,049,862	220,092	343	37
1892	1,253,271	257,547	21,795	3,985,928	241,747	51,188	3,946
1893	1,433,329	351,884	30,800	4,185,262	241,042		
1894	1,656,728	464,228	39,273	5,198,550	315,471	253	33
1895	1,291,192	465,931	38,202	3,838,889	226,092	3,632	355
1896	1,419,278	339,619	31,635	4,207,262	230,017		
1897	1,046,820	257,696	22,437	3,686,316	173,291	5,044	227
1898	1,195,263	298,132	28,414	3,571,472	195,667		
1899	1,256,177	224,544	21,942	3,376,976	177,883	42,947	2,722
1900	1,255,792	148,065	15,541	4,233,448	224,928	184,814	16,136
1901	1,346,211	153,858	16,829	3,937,345	219,953	183,970	14,675
1902	1,378,764	238,122	23,941	3,627,295	234,262	168,515	17,904
1903	1,570,694	289,336	30,663	3,593,864	259,869	191,816	18,929
1904	1,455,386	331,392	33,350	4,710,626	259,215	170,299	19,261
1905	1,280,828	272,315	27,093	4,732,851	250,838	139,712	14,194
1906	1,408,154	293,990	29,480	6,046,778	329,273	133,152	15,220
Canada:							
1890	4,046,659	1,894,961	151,530	7,023,308	278,854	2,129,900	128,981
1891	3,774,187	2,497,121	210,304	5,182,752	219,961	1,450,694	85,452
1892	3,636,764	1,585,538	134,413	8,188,607	414,747	681,337	46,609
1893	2,058,854	1,337,803	113,863	4,691,908	233,001	82,835	6,790
1894	3,519,815	1,195,625	93,289	4,012,690	178,903	299,563	17,955

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Value of total packing-house products.	Beef, canned.		Beef, cured: Salted or pickled.		Beef, fresh.	
		Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Canada—Cont'd.							
1895	$3,046,634	1,133,616	$96,955	3,355,362	$158,062	61,110	$3,983
1896	3,686,583	1,221,240	102,938	3,417,645	167,250	58,890	3,834
1897	3,074,142	1,265,262	97,958	3,065,248	133,276	25,605	1,470
1898	3,890,947	500,699	38,512	1,947,310	89,901	144,860	9,676
1899	3,278,923	1,500,082	129,218	1,713,031	84,136	483,851	39,055
1900	1,889,902	827,214	71,646	1,881,653	98,872	26,861	2,372
1901	2,874,151	489,088	50,414	2,148,989	113,185	90,004	8,987
1902	3,010,026	787,538	78,752	2,110,462	127,885	144,168	17,612
1903	1,697,319	550,578	58,575	2,518,424	186,713	621,006	68,049
1904	4,036,456	503,794	50,567	3,359,679	187,582	250,180	24,408
1905	2,337,649	409,427	45,248	1,591,462	77,452	220,196	22,855
1906	3,463,350	460,310	45,424	2,807,669	152,634	163,048	16,974
Cuba:							
1890	2,887,896	1,056	84	56,400	2,663	23,176	3,294
1891	2,775,698	6,288	531	63,500	2,676	51,222	6,485
1892	4,180,345	399,358	34,840	234,200	12,215	51,621	5,578
1893	5,602,729	588,135	49,878	64,036	3,259	54,916	6,649
1894	5,082,340	119,054	10,139	80,827	4,527	38,533	3,742
1895	3,217,056	20,486	1,624	21,400	1,141	50,538	4,872
1896	2,397,310	23,484	1,778	26,150	1,277	51,497	5,642
1897	2,339,740	32,686	2,508	91,000	4,141	12,921	753
1898	2,233,367	81,046	6,412	279,189	13,710	2,932	334
1899	3,023,450	144,680	13,698	592,104	29,614	23,748	2,116
1900	4,717,044	74,229	5,412	267,739	15,651	3,140,627	319,302
1901	5,149,990	94,208	9,619	141,468	7,648	2,096,231	230,084
1902	5,217,117	71,351	6,862	100,119	5,923	2,691,568	309,568
1903	4,438,762	66,167	5,592	20,561	1,332	299,596	27,568
1904	4,375,060	77,943	6,679	31,045	1,808	146,151	13,394
1905	4,786,441	128,529	11,435	50,565	2,830	47,847	4,649
1906	5,745,738	243,929	23,585	65,884	4,055	116,186	10,047
Denmark:							
1890	1,142,401	80,180	6,383	1,001,800	44,223	.....	.....
1891	1,518,726	318,800	26,569	3,141,700	152,343	.....	.....
1892	1,444,392	160,040	12,921	666,240	34,051	.....	.....
1893	1,168,665	57,825	4,837	956,860	48,910	.....	.....
1894	1,209,890	72,800	5,856	553,700	28,918	.....	.....
1895	885,422	94,200	7,392	787,700	38,206	.....	.....
1896	795,981	129,300	10,329	548,100	26,547	.....	.....
1897	523,607	181,375	14,791	385,100	17,853	.....	.....
1898	995,541	40,775	3,547	287,800	12,578	.....	.....
1899	1,332,799	81,200	7,216	543,745	26,870	.....	.....
1900	1,622,358	88,602	7,360	590,400	30,018	.....	.....
1901	2,088,246	102,650	10,055	1,032,860	55,082	.....	.....
1902	2,583,860	124,505	12,520	761,400	43,373	.....	.....
1903	2,037,927	112,885	11,005	989,400	61,978	.....	.....
1904	1,700,840	115,579	11,488	1,460,255	77,419	.....	.....
1905	1,778,774	89,317	8,765	1,163,800	63,377	.....	.....
1906	3,059,906	125,850	12,362	2,179,175	117,209	30,800	2,464
France:							
1890	4,541,194	7,316,581	601,503	352,400	16,400	.....	.....
1891	5,874,834	6,371,634	504,761	274,640	14,341	.....	.....
1892	5,215,634	12,183,246	1,022,833	728,448	45,410	.....	.....
1893	2,893,734	2,655,843	223,508	292,800	14,678	.....	.....
1894	4,586,643	1,304,306	107,312	775,300	43,755	.....	.....
1895	4,735,364	6,761,639	558,165	378,900	22,131	.....	.....
1896	4,869,862	5,387,610	448,070	583,500	32,857	.....	.....
1897	4,112,422	1,111,143	91,471	236,766	11,371	.....	.....
1898	3,070,062	422,017	35,503	323,775	17,911	.....	.....
1899	4,530,340	354,534	32,029	180,400	10,304	.....	.....
1900	4,230,094	1,276,789	126,392	597,900	33,997	.....	.....
1901	2,977,144	678,504	68,089	136,290	6,887	.....	.....
1902	2,028,261	823,776	82,807	123,000	7,505	.....	.....
1903	1,915,573	400,374	40,164	187,400	11,944	.....	.....
1904	2,273,294	350,355	34,045	193,320	10,384	19,000	1,575
1905	1,508,348	585,469	58,618	94,250	4,798	.....	.....
1906	2,378,797	1,058,309	104,676	251,600	13,161	.....	.....
Germany:							
1890	10,990,109	4,239,891	320,085	6,022,890	293,933	.....	.....
1891	11,786,855	7,981,098	593,034	12,004,715	614,080	.....	.....
1892	13,612,877	6,014,005	476,381	8,000,621	459,918	.....	.....
1893	12,221,562	10,017,142	829,652	6,017,876	311,509	.....	.....
1894	15,398,783	4,518,923	376,917	7,399,430	428,258	1,066	80
1895	13,845,078	5,978,434	518,260	8,962,514	541,750	329,750	27,183
1896	14,012,647	7,539,806	616,540	6,461,978	358,750	.....	.....
1897	14,930,578	4,611,748	372,460	4,871,310	243,713	.....	.....
1898	23,593,502	5,069,003	446,440	4,529,450	234,672	.....	.....
1899	24,431,953	3,334,880	294,123	5,787,329	305,146	.....	.....
1900	21,299,725	3,876,806	361,319	5,827,031	323,928	41,000	3,383
1901	22,644,469	2,559,754	247,804	6,751,003	375,737	.....	.....

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Value of total packing-house products.	Beef, canned.		Beef, cured: Salted or pickled.		Beef, fresh.	
		Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Germany—Cont'd.							
1902	$24,510,367	353,414	$35,318	8,730,223	$570,922	.....	.....
1903	23,210,630	985,433	98,702	9,749,423	707,037	.....	.....
1904	22,328,023	1,221,496	122,031	7,599,628	448,667	.....	.....
1905	21,927,597	913,120	89,144	6,715,918	395,887	111,725	$9,192
1906	30,066,304	1,715,288	166,736	24,102,929	1,498,891	1,267,035	107,470
Italy:							
1890	405,931	6,752	520	55,000	2,535	.....	.....
1891	583,941	21,520	1,747	58,234	2,738	.....	.....
1892	346,938	73,584	5,995	79,000	3,978	.....	.....
1893	309,156	30,336	2,576	32,800	1,655	.....	.....
1894	374,923	7,272	626	27,300	1,280	.....	.....
1895	199,430	24,854	1,972	106,200	5,357	.....	.....
1896	257,646	25,768	2,065	25,200	1,315	.....	.....
1897	432,860	48,565	3,757	35,800	1,800	.....	.....
1898	653,154	19,550	1,570	39,600	1,757	.....	.....
1899	1,633,871	5,136	416	79,400	3,345	.....	.....
1900	1,324,223	7,744	666	41,800	1,732	.....	.....
1901	1,053,374	53,910	5,255	58,000	3,025	.....	.....
1902	797,498	52,148	5,201	57,150	3,197	.....	.....
1903	1,214,664	57,216	5,697	116,850	7,290	.....	.....
1904	1,602,480	133,506	13,341	135,250	8,327	33,514	3,016
1905	1,103,080	117,970	11,853	40,800	2,208	12,262	1,246
1906	1,200,076	91,939	9,201	46,000	2,560	110,574	9,118
Netherlands:							
1890	8,604,832	1,650,118	143,601	772,383	37,938	.....	.....
1891	10,174,743	3,723,470	311,202	1,773,370	110,344	.....	.....
1892	12,031,831	2,869,587	267,042	1,468,178	83,892	.....	.....
1893	11,792,768	2,649,193	248,959	1,499,217	88,501	.....	.....
1894	12,893,772	1,808,849	167,552	1,540,090	90,223	.....	.....
1895	8,670,604	2,172,148	197,641	2,507,097	150,628	81,500	5,540
1896	9,252,844	1,698,127	161,303	2,104,838	109,316	.....	.....
1897	9,601,130	1,664,825	158,663	2,293,695	130,169	.....	.....
1898	12,264,960	2,158,767	178,273	1,703,164	97,439	.....	.....
1899	13,589,520	1,120,001	101,384	955,650	58,825	.....	.....
1900	14,147,887	967,074	88,941	1,455,490	98,194	.....	.....
1901	13,273,325	774,164	73,167	1,013,435	61,149	.....	.....
1902	14,083,648	224,975	22,145	1,003,136	67,365	.....	.....
1903	13,088,135	255,300	25,850	902,470	69,115	.....	.....
1904	16,361,435	390,545	38,414	1,482,075	83,100	.....	.....
1905	13,877,456	472,000	46,766	1,056,050	56,340	30,000	2,400
1906	19,793,818	468,980	46,645	1,303,307	73,793	32,250	2,580
Norway and Sweden:							
1890	654,753	18,920	1,872	1,691,300	107,555	.....	.....
1891	1,139,735	33,888	2,474	5,086,940	276,354	.....	.....
1892	658,649	55,064	4,288	1,448,600	82,845	.....	.....
1893	650,477	106,546	8,788	2,007,800	104,832	.....	.....
1894	1,040,723	67,424	5,461	2,552,800	135,759	.....	.....
1895	780,549	87,592	6,930	986,100	49,715	.....	.....
1896	1,162,965	108,364	8,929	1,947,500	94,144	.....	.....
1897	1,072,926	142,268	12,385	1,646,700	70,133	.....	.....
1898	1,127,426	25,740	2,028	522,400	25,404	.....	.....
1899	4,270,007	719,396	61,412	2,841,450	136,815	.....	.....
1900	3,192,120	439,645	38,391	1,384,400	68,811	.....	.....
1901	4,435,837	455,936	42,150	2,796,000	142,479	.....	.....
1902	3,388,663	540,480	50,919	2,644,700	137,040	.....	.....
1903	2,748,564	533,142	53,057	1,749,200	99,952	.....	.....
1904	3,578,348	881,780	85,249	2,358,820	128,402	.....	.....
1905	3,130,726	886,720	87,238	1,539,987	84,244	.....	.....
1906	4,587,966	684,619	69,574	3,128,302	165,592	1,050	142
United Kingdom:							
1890	79,286,696	64,265,020	5,260,542	63,006,337	3,609,594	171,032,579	12,725,459
1891	79,717,993	80,246,787	6,669,673	46,638,369	2,833,270	192,456,458	15,221,751
1892	77,249,652	59,048,407	5,499,829	33,935,982	1,981,866	219,103,267	17,945,892
1893	81,865,409	57,089,367	5,330,762	26,377,131	1,503,535	205,911,093	17,720,032
1894	81,405,765	42,544,532	3,958,995	26,333,242	1,535,385	193,331,292	16,659,814
1895	78,993,634	40,310,196	3,562,993	28,226,581	1,643,509	190,736,186	16,784,936
1896	81,019,326	40,092,098	3,629,301	36,151,600	2,119,923	224,507,040	18,950,744
1897	83,779,574	34,714,439	3,019,451	37,535,924	2,081,108	290,007,772	22,626,778
1898	96,831,742	20,763,131	1,828,593	18,310,701	1,037,972	274,183,636	22,922,136
1899	97,681,970	22,723,304	2,066,308	18,861,614	1,080,351	281,041,427	23,456,488
1900	109,374,068	32,273,374	3,052,430	18,125,780	1,069,152	324,260,115	29,174,984
1901	119,405,122	40,203,687	3,912,646	19,559,941	1,162,724	348,985,779	31,569,007
1902	121,903,963	51,282,929	5,081,762	16,155,785	1,055,825	297,844,537	28,612,653
1903	107,693,548	47,253,444	4,857,124	19,012,711	1,455,747	252,594,346	24,803,505
1904	103,271,539	45,155,744	4,605,817	19,313,714	1,139,539	298,117,225	26,715,741
1905	100,613,744	39,757,686	4,008,339	17,231,606	997,787	235,158,393	22,021,642
1906	112,713,772	44,335,871	4,431,616	18,681,138	1,102,665	265,444,554	24,075,717

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Value of canned meat, not elsewhere specified.	Value of grease, grease scraps, and other soap stock.	Hides and skins, other than furs.		Lard.		Lard compounds.	
			Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Total, all countries:								
1890		$1,506,819		$1,828,635	471,083,598	$33,455,520	2,520,142	$105,043
1891		2,038,886		1,333,655	498,343,927	34,414,323	1,347,386	62,194
1892		1,298,598	(a)	1,223,895	460,045,776	33,201,621	1,350,513	66,470
1893		1,067,723		1,497,003	365,693,501	34,643,993	1,205,190	87,540
1894		1,380,299		3,972,494	447,566,867	40,089,809	1,343,944	95,922
1895		904,071	36,002,859	2,310,323	474,895,274	36,821,508	540,288	40,279
1896		1,516,763	39,545,324	3,858,946	509,534,256	33,589,851	2,378,508	136,568
1897		2,070,111	31,119,166	2,388,530	568,315,610	29,126,485	17,650,546	928,242
1898		1,964,565	11,536,073	1,015,032	709,344,045	39,710,672	25,330,276	1,307,238
1899		2,576,507	10,140,840	929,117	711,259,851	42,208,465	23,318,884	1,256,052
1900	$1,724,064	2,944,322	17,486,256	804,674	661,813,663	41,939,164	25,852,685	1,475,064
1901	1,556,671	3,339,948	1,161,749	1,064,952	611,357,514	46,560,148	23,359,966	1,449,878
1902	1,801,385	2,610,925	9,372,747	906,504	556,840,222	52,375,864	36,201,744	2,687,653
1903	1,831,940	2,926,565	12,859,549	1,224,409	490,755,821	50,854,504	46,130,004	3,607,542
1904	2,254,235	3,311,777	32,727,643	3,246,887	561,302,643	46,347,520	53,603,545	3,581,813
1905	1,974,693	3,710,907	10,268,722	1,051,641	610,238,899	47,243,181	61,215,187	3,613,235
1906	1,593,497	4,138,333	10,752,827	1,223,255	741,516,886	60,132,091	67,621,310	4,154,183
Austria-Hungary:								
1890					6,400	458		
1891				575	106,000	7,427		
1892		3,971	(a)	7,401	10,000	700		
1893				16,188				
1894				607				
1895			25,275	12,150				
1896		1,610	67,437	10,563	487,877	34,135		
1897		6,526	3,600	242	5,060,916	242,294	338,815	15,575
1898		18,225			19,521,452	955,975	338,962	14,610
1899		101,955	1,730	232	13,984,927	781,973	162,251	6,872
1900	190	75,125			574,969	33,204	282,076	11,991
1901	260	98,468	3,000	600	378,550	26,607	95,665	5,555
1902	2,600	6,532	975	110	24,625	2,100	267,056	17,430
1903	1,220	84,305			568,375	56,384	8,250	675
1904	174	90,182	1,142,937	107,941	3,067,863	222,656	29,375	1,965
1905	4,489	201,407	197,690	18,435	8,161,755	627,972	466,256	23,798
1906	2,006	139,255	27,000	1,680	20,140,886	1,613,654	1,032,976	57,998
Belgium:								
1890		20,576		53,218	43,970,299	3,149,018		
1891		64,649		70,145	49,132,982	3,352,419		
1892		27,407	(a)	46,443	31,218,041	2,224,625		
1893		16,125		48,927	26,098,547	2,475,040		
1894		49,664		216,561	32,922,074	2,927,798		
1895		11,753	1,159,839	73,598	38,163,335	2,877,197		
1896		32,615	1,955,348	178,526	30,182,418	1,900,065		
1897		11,697	1,004,691	75,254	29,827,434	1,414,427	742,765	39,063
1898		88,585	178,455	15,117	36,251,077	1,987,009	430,769	25,356
1899		128,104	91,132	8,109	37,307,555	2,121,249	619,102	33,565
1900	11,949	204,748	37,175	2,745	25,565,833	1,543,085	1,158,308	59,212
1901	4,052	329,693	30,420	5,163	31,496,759	2,407,202	529,528	33,514
1902	13,113	170,115	35,560	4,037	30,404,880	2,874,757	601,291	50,382
1903	16,633	265,310	279,779	46,019	23,702,251	2,413,561	1,527,069	114,661
1904	9,189	340,411	748,900	75,145	25,782,681	2,160,237	613,407	40,430
1905	5,344	294,494	111,338	11,913	29,080,868	2,233,286	1,318,314	79,414
1906	20,286	246,259	547,910	83,946	37,722,055	3,087,758	3,228,937	202,021
British West Indies:								
1890		8,748		2,004	2,429,297	182,904		
1891		2,132		1,958	2,333,143	178,123		
1892		8,918	(a)	1,244	2,461,895	186,773		
1893		5,083		1,212	2,460,110	230,536		
1894		3,770		1,176	2,621,657	240,049		
1895		3,193	7,056	1,062	2,430,443	188,263	2,346	128
1896		6,145	2,421	314	2,786,019	190,784	2,020	103
1897		3,785	2,076	306	2,448,882	134,893	82,782	3,791
1898		3,802			2,381,571	153,346	105,288	4,501
1899		7,691	1,600	165	2,473,287	163,517	118,228	5,395
1900	3,706	12,001	6,973	965	2,349,407	167,879	87,007	5,278
1901	4,646	4,237	11,581	2,197	2,471,935	187,401	79,589	4,905
1902	9,959	4,264	6,513	1,123	2,238,938	202,616	114,745	9,041
1903	15,632	6,758	4,983	480	2,823,422	255,418	298,042	24,619
1904	19,262	5,885	477	41	2,688,563	205,450	480,047	32,461
1905	17,864	5,794			2,553,258	177,380	636,756	34,738
1906	24,316	7,509	6,434	720	2,360,432	175,666	1,060,209	64,105

a Not stated.

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Value of canned meat, not els where specified.	Value of grease, grease scraps, and other soap stock.	Hides and skins, other than furs.		Lard.		Lard compounds.	
			Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Canada:								
1890		$134,744		$634,695	5,370,691	$355,120		
1891		100,389		453,636	5,428,801	351,943		
1892		73,532	(a)	359,462	6,064,974	421,645		
1893		86,477		533,911	2,025,753	165,902		
1894		237,462		1,034,805	2,430,626	187,372	20,266	$1,528
1895		273,221	18,257,885	1,084,085	2,210,852	167,294	28,823	1,836
1896		294,815	12,912,570	1,045,182	6,835,005	459,367	36,155	2,112
1897		189,357	13,467,055	940,735	5,060,473	233,652	6,380	293
1898		143,913	5,142,937	460,325	6,427,522	345,444	36,728	2,098
1899		143,555	3,878,576	355,871	6,757,669	358,570	168,103	9,888
1900	$33,053	223,975	3,049,854	350,605	489,903	33,452	390,010	25,673
1901	98,616	235,932	5,374,148	561,348	2,954,545	241,261	554,647	40,450
1902	89,667	266,081	3,465,715	380,208	1,369,089	135,165	145,806	13,687
1903	58,871	477,789	5,389,903	521,096	1,030,565	102,814	569,520	51,062
1904	73,095	379,066	9,393,145	979,579	1,115,993	91,877	590,194	44,025
1905	116,446	269,958	3,008,700	330,448	1,381,713	109,197	459,267	33,528
1906	102,455	345,364	793,153	101,565	7,696,903	643,476	714,490	53,546
Cuba:								
1890		27,992		305	33,142,436	2,233,821		
1891		28,746		465	32,054,107	2,079,534		
1892		44,319	(a)	223	43,982,187	2,974,545		
1893		22,650		549	42,683,652	4,023,917		
1894		34,849		711	42,340,578	3,625,545		
1895		24,605			30,672,512	2,209,067		
1896		7,128			26,218,302	1,551,185		
1897		6,793	800	40	25,717,489	1,255,183	245,809	10,710
1898		10,085			20,139,515	1,027,657	216,611	10,454
1899		27,566	800	170	27,291,504	1,472,604	131,083	8,616
1900	13,391	52,146	5,381	685	34,736,167	2,183,001	375,477	20,847
1901	14,034	60,776	10,637	3,353	38,304,327	2,811,696	1,458,152	94,867
1902	21,395	124,428	3,961	997	25,374,052	2,144,229	12,394,627	921,661
1903	23,324	155,663	654	240	20,379,728	1,812,639	14,029,166	1,060,548
1904	10,393	176,522	4,697	946	19,666,613	1,480,413	20,655,092	1,353,103
1905	14,397	154,618	7,585	1,757	24,245,865	1,792,474	22,165,157	1,234,683
1906	16,640	126,495	192	18	35,428,208	2,755,313	15,055,536	836,966
Denmark:								
1890			(a)	300	14,003,447	971,942		
1891		1,967			13,025,375	858,591		
1892		115	(a)	2,632	12,403,067	871,189		
1893		248			7,121,384	659,256		
1894		98	(a)	6,358	7,937,853	694,430		
1895		1,550	12,346	805	6,952,467	543,638	4,035	242
1896		100			7,473,998	482,650		
1897		3,069	3,160	140	4,294,631	210,595	916,907	50,081
1898		50	10,500	940	9,207,095	499,081	1,130,361	62,907
1899		129	64,744	4,836	10,536,795	608,946	1,204,353	67,874
1900	2,569	5,237	280	50	11,434,684	675,227	1,268,482	72,260
1901	4,920	3,109	750	120	10,833,844	796,625	1,434,360	88,362
1902	962	1,200			11,480,356	1,043,187	900,387	70,538
1903	25	2,777			8,578,419	865,626	1,611,893	127,256
1904	325	2,055			8,207,693	663,254	805,094	63,118
1905	1,339	4,231			10,954,652	843,816	1,254,870	78,335
1906	2,315	4,400	50,222	4,677	14,986,543	1,244,887	2,684,112	159,389
France:								
1890		201,599		180,635	44,348,149	3,074,728		
1891		373,022		277,433	58,123,323	3,909,177		
1892		93,819	(a)	151,101	45,921,376	3,296,907		
1893		40,620		337,695	16,344,945	1,490,243		
1894		17,379		1,031,855	29,841,320	2,695,228		
1895		3,707	6,406,184	428,512	34,665,860	2,681,659		
1896		192,059	9,537,272	1,021,321	32,093,211	2,131,390	75,593	4,678
1897		1,045,027	4,829,171	404,728	20,934,590	1,032,286	4,618,748	223,712
1898		625,476	687,736	67,382	21,307,239	1,129,191	2,159,322	105,799
1899		456,648	259,151	30,273	32,312,597	1,830,281	1,281,870	66,633
1900	8,751	320,269	63,791	13,005	31,174,577	1,867,981	642,790	37,164
1901	9,893	366,578	177,054	18,520	15,471,922	1,148,518	184,434	10,820
1902	19,477	422,757	143,394	18,542	7,552,774	667,164	30,227	2,695
1903	27,029	351,916	129,703	15,599	4,346,321	427,708	1,548,451	125,037
1904	54,387	321,494	3,169,237	291,613	7,865,240	624,238	62,617	4,051
1905	13,753	205,729	191,348	23,671	4,820,407	368,096	51,280	2,840
1906	16,845	301,727	220,083	25,978	5,427,171	436,443	2,497,207	147,704

a Not stated.

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Value of canned meat, not elsewhere specified.	Value of grease, grease scraps, and other soap stock.	Hides and skins, other than furs.		Lard.		Lard compounds.	
			Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Germany:								
1890		$237,773		$329,516	116,527,934	$7,815,484		
1891		426,250		200,913	106,278,235	7,048,606		
1892		300,932	(a)	244,276	110,967,731	7,722,727		
1893		195,025		213,886	70,170,320	6,429,211		
1894		239,593		680,226	96,010,508	8,488,653		
1895		116,126	4,398,886	308,630	104,121,137	8,018,516		
1896		235,128	10,342,747	1,074,268	121,893,903	7,788,975	16,460	$915
1897		120,560	8,333,374	652,613	166,192,473	8,317,050	3,923,615	226,552
1898		216,581	4,879,327	392,292	233,844,879	12,820,843	5,495,194	318,622
1899		447,524	5,118,499	430,417	229,230,175	13,600,767	5,684,936	314,092
1900	$84,087	452,181	3,720,520	327,449	195,595,578	12,269,958	5,570,182	287,614
1901	29,563	384,907	5,044,770	393,132	182,389,879	13,700,875	4,593,239	288,936
1902	20,886	57,005	4,729,636	349,415	173,517,891	16,262,251	3,115,557	231,096
1903	41,217	148,133	5,696,485	440,881	148,962,391	15,448,598	4,145,197	321,028
1904	56,015	225,627	5,590,002	514,773	177,842,314	14,931,540	7,017,046	477,769
1905	46,671	390,555	5,719,361	534,556	188,090,105	14,848,104	8,792,312	536,371
1906	29,696	423,056	7,337,954	692,388	240,277,836	19,522,626	3,758,087	232,295
Italy:								
1890		13,136		20,403	2,523,726	165,350		
1891		50,505		33,181	2,441,116	147,874		
1892		1,576	(a)	18,402	2,043,735	132,076		
1893		1,635		93,021	1,476,500	130,258		
1894		178		191,388	840,030	70,134		
1895		456	1,142,392	112,836	625,760	45,008		
1896		9,659	735,433	91,404	838,678	53,811		
1897		24,094	440,314	65,611	2,274,703	100,960	3,300	197
1898		18,901	58,908	9,075	3,836,848	195,620	90	5
1899		61,240	41,582	6,266	7,483,483	417,466	19,663	1,014
1900	10,402	66,202	57,471	8,961	4,346,460	261,096	6,014	435
1901	6,723	110,703	3,566	950	3,221,601	237,272	56,745	4,117
1902	1,699	19,664	74,815	10,528	2,348,733	222,845	7,590	700
1903	1,980	35,022	337,997	40,684	3,375,019	351,265	13,436	1,325
1904	6,781	161,057	572,335	69,070	3,798,932	314,173	2,756	220
1905	1,488	250,960	126,258	15,585	3,134,994	238,642	11,600	635
1906	2,227	332,223	40	5	1,840,164	149,830		
Netherlands:								
1890		75,222		23,838	11,312,419	821,204		
1891		19,734		84,384	26,681,523	1,948,183		
1892		44,155	(a)	80,509	42,498,328	3,393,556		
1893		4,309		42,818	25,268,281	2,437,825		
1894		39,875		24,305	39,912,185	3,732,321		
1895		8,955	131,980	11,398	28,456,561	2,294,213		
1896		9,068	884,483	124,745	32,998,546	2,387,634	57,596	3,419
1897		7,138	294,128	35,344	61,181,905	3,265,543	249,639	11,105
1898		29,412	134,158	29,360	63,663,059	3,668,680	4,243,885	174,348
1899		65,054	281,439	45,419	74,865,099	4,535,369	2,953,597	127,591
1900	65,271	341,437	271,231	70,647	72,128,751	4,667,085	3,914,444	221,110
1901	7,282	56,504	280,454	55,226	51,833,885	3,917,826	4,221,583	268,550
1902	4,873	28,491	282,754	68,859	53,269,049	5,060,486	5,440,792	337,354
1903	16,588	37,329	603,010	120,451	42,002,215	4,470,418	2,385,118	174,164
1904	691	32,703	5,807,189	581,793	71,024,213	6,014,290	5,499,033	293,029
1905	1,509	46,203	432,339	63,693	63,407,667	4,945,845	3,738,360	241,177
1906	37,519	147,252	1,244,825	246,435	80,038,280	6,457,096	6,511,585	446,238
Norway and Sweden:								
1890			(a)	625	724,109	47,353		
1891		41			2,147,671	149,653		
1892		735			2,291,932	163,984		
1893		82	(a)	9	2,153,728	192,406		
1894			(a)	675	3,457,297	288,763		
1895		189			3,357,535	249,779		
1896		4,000	3,100	339	3,704,516	232,891		
1897		105			4,925,118	241,457	176,831	10,604
1898		1,114			5,145,447	269,795	38,545	2,312
1899		10,506			13,157,399	755,285	310,045	17,504
1900	21,146	17,513	8,070	602	12,595,960	735,763	260,404	15,940
1901	9,544	3,439			11,821,739	861,893	62,116	4,291
1902	18,524	2,772			8,533,516	761,529	32,834	2,550
1903	4,745	4,381			8,059,187	813,288	226,746	19,504
1904	2,646	9,717			8,600,132	688,754	456,425	35,132
1905	5,059	16,172	31,160	3,000	11,780,444	913,793	127,376	7,645
1906	5,236	30,124	15,000	1,510	11,242,081	954,014	278,598	17,746

(a) Not stated.

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Value of canned meat, not elsewhere specified.	Value of grease, grease scraps, and other soap stock.	Hides and skins, other than furs.		Lard.		Lard compounds.	
			Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
United Kingdom:								
1890		$646,278		$554,121	150,808,980	$10,944,212		
1891		835,872		151,676	158,561,052	11,037,910		
1892		517,380	(a)	264,988	124,952,485	9,072,470		
1893		550,629		188,847	138,355,415	13,278,004		
1894		595,562		699,016	149,691,959	13,458,563	950,570	$72,656
1895		323,467	4,020,678	251,247	184,251,911	14,301,618	382,325	29,879
1896		588,160	2,684,274	277,197	201,924,144	13,521,493	1,126,449	65,744
1897		456,955	2,098,358	157,030	192,116,083	10,040,789	4,294,505	232,093
1898		564,106	318,551	29,456	241,077,725	13,807,640	6,330,738	356,215
1899		949,501	375,159	43,030	204,645,770	12,310,730	5,694,034	327,601
1900	$957,061	965,163	204,198	20,070	217,486,742	13,908,135	5,951,131	359,848
1901	789,095	1,375,663	134,921	14,337	211,264,628	16,377,255	6,770,980	441,085
1902	848,929	1,219,250	304,091	32,854	199,442,907	19,019,841	10,200,349	785,017
1903	1,008,859	1,051,572	201,378	18,346	196,458,773	20,747,232	14,265,452	1,141,281
1904	1,456,515	1,130,276	5,930,746	590,232	199,015,559	16,176,939	10,690,913	765,065
1905	1,085,249	1,412,487	136,341	17,874	228,678,646	17,464,838	10,814,664	669,094
1906	815,149	1,552,959	325,404	41,683	241,903,704	19,511,295	16,666,892	1,047,339

Country and year ending June 30—	Oil, oleo.		Oleomargarin.		Pork, canned.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Total, all countries:						
1890	68,218,098	$6,476,258	2,535,926	$297,264		
1891	80,231,035	7,859,130	1,986,743	255,024		
1892	91,581,703	9,011,889	1,610,837	195,587		
1893	113,939,363	11,207,250	3,479,322	416,386		
1894	123,295,895	11,942,842	3,898,950	475,003		
1895	78,098,878	7,107,018	10,100,897	992,464		
1896	103,276,756	8,087,905	6,063,699	587,269		
1897	113,506,152	6,742,061	4,864,351	472,856		
1898	132,579,277	7,904,413	4,328,536	386,297		
1899	142,390,492	9,183,659	5,549,322	509,703		
1900	146,739,681	10,503,856	4,256,067	416,544	8,496,074	$658,402
1901	161,651,413	11,846,373	4,990,699	484,501	8,945,594	708,381
1902	138,546,088	12,254,969	5,721,254	601,521	9,603,882	832,910
1903	126,010,339	11,981,888	7,645,652	798,273	13,590,897	1,369,687
1904	165,183,839	12,873,558	6,137,251	605,874	9,479,312	963,321
1905	145,228,245	11,485,145	7,863,164	711,038	10,254,239	993,394
1906	209,658,075	17,455,976	11,794,174	1,033,256	12,699,800	1,215,857
Austria-Hungary:						
1890						
1891						
1892						
1893						
1894						
1895						
1896						
1897	110,210	5,500				
1898						
1899	946,500	55,935	1,000	95		
1900	73,634	4,786				
1901	676,625	42,350			300	30
1902	339,546	26,540				
1903					6,465	681
1904	333,200	24,448			1,920	212
1905	1,680,802	120,933			28,200	2,818
1906	4,315,001	373,360	1,020,124	83,943	60,195	5,773
Belgium:						
1890	1,081,008	102,509				
1891	557,469	54,663				
1892	553,023	53,047	27,220	3,158		
1893	987,560	103,267	45,640	5,266		
1894	140,613	14,500	76,867	10,433		
1895	2,757,665	250,778	60,180	6,889		
1896	1,396,447	107,816	71,180	7,738		
1897	1,785,285	102,352	50,400	5,328		
1898	1,126,237	72,188	43,260	4,508		
1899	2,065,814	136,054	44,680	4,678		

a Not stated.

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Oil, oleo.		Oleomargarin.		Pork, canned.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Belgium—Continued.						
1900	2,892,778	$212,457	58,265	$6,073	916,373	$60,317
1901	1,800,757	135,558	77,770	7,892	427,914	29,256
1902	1,703,377	151,273	105,365	10,642	463,740	41,647
1903	896,368	90,370	85,360	9,047	326,423	31,779
1904	3,189,471	257,250	88,478	8,988	341,512	32,201
1905	2,146,166	173,309	74,060	7,447	206,891	20,352
1906	3,590,279	317,245	392,026	36,071	968,972	89,796
British West Indies:						
1890			724,020	82,272		
1891			395,518	44,291		
1892			697,137	85,607		
1893			1,494,195	175,029		
1894			1,629,224	194,276		
1895			1,259,090	147,493		
1896			1,386,563	146,660		
1897			1,332,133	132,072		
1898			1,167,295	113,402		
1899			1,527,342	148,097		
1900			1,466,638	146,959		
1901			1,333,358	134,498	1,290	139
1902	29,269	2,965	1,353,324	137,332	1,448	132
1903	24,879	2,496	1,504,966	157,195	5,213	585
1904	61,695	4,350	1,074,095	108,525	18,218	1,841
1905	56,747	4,650	965,521	92,107	13,408	1,295
1906	51,747	4,577	917,726	90,044	40,131	4,066
Canada:						
1890			310,511	43,256		
1891	477,190	43,146	426,309	60,971		
1892	325,578	33,208	45,300	6,795		
1893	3,995	528	157,283	21,353		
1894	296,900	26,721	41,250	5,726		
1895	24,000	2,160	100	16		
1896	804,083	51,724				
1897	491,376	26,003	12,100	1,120		
1898	343,436	19,131	395	48		
1899	196,045	10,651	18,450	2,200		
1900	27,494	1,906	3,066	245	29,670	2,726
1901	65,896	4,827	28,810	2,946	49,155	5,807
1902	817,375	74,126	26,203	2,699	87,795	8,464
1903	202,750	19,735	40	12	142,012	14,042
1904	159,634	13,239	2,200	272	44,773	4,664
1905	47,263	3,806	73	6	31,805	4,068
1906	106,514	9,198	22,216	3,005	9,741	1,019
Cuba:						
1890			56,360	7,113		
1891			58,020	6,611		
1892			66,397	7,520		
1893			5,624	748		
1894			4,300	538		
1895			4,620	613		
1896						
1897						
1898			250	26		
1899	2,000	109	157,706	19,658		
1900			516,463	60,693	51,099	4,587
1901	8,255	494	722,075	81,909	2,071	229
1902			777,534	88,467	6,537	771
1903	386	41	365,955	40,717	18,158	1,781
1904	2,688	225	349,800	36,013	16,748	1,666
1905	82,685	7,936	477,985	46,291	51,287	5,181
1906	6,442	600	372,664	37,553	35,535	3,448
Denmark:						
1890	466,237	47,029				
1891	2,792,531	268,664				
1892	4,247,075	417,751				
1893	4,316,817	422,195				
1894	3,980,723	394,315				
1895	2,237,856	210,056				
1896	2,942,685	228,683				
1897	2,614,669	151,840				
1898	3,146,372	178,175	6,278	753		
1899	3,657,257	240,511	27,940	2,500		
1900	8,628,948	675,053				
1901	11,734,927	909,984				
1902	12,933,733	1,203,164				
1903	8,089,686	803,416			18,800	1,950
1904	7,925,559	621,627	9,600	800	15,529	1,577
1905	6,275,438	523,329	108,034	10,483	17,810	1,750
1906	7,125,738	645,862	3,475,018	283,014	370,453	35,612

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Oil, oleo.		Oleomargarin.		Pork, canned.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
France:						
1890	1,142,474	$110,141				
1891	680,823	67,652				
1892	30,296	3,030				
1893	2,394,980	219,209	560	$56		
1894	1,424,055	134,306				
1895						
1896	158,800	10,841				
1897	93,600	9,666				
1898	651,515	38,764	1,240	124		
1899	142,872	9,335				
1900	167,047	10,800			32,532	$2,498
1901	22,500	1,800			76,475	6,916
1902	1,020,000	87,350			77,425	7,802
1903	12,600	1,205			366,646	35,576
1904	19,435	1,560			223,298	23,093
1905					146,547	14,503
1906	48,813	3,955			129,429	12,864
Germany:						
1890	10,561,964	1,054,371	98,600	14,846		
1891	12,733,532	1,253,556				
1892	18,584,059	1,935,537				
1893	23,545,712	2,367,062	31,030	4,337		
1894	28,996,667	2,837,846	220,860	19,500		
1895	21,202,754	1,839,310	1,563,260	123,363		
1896	23,021,053	1,575,906	2,382,026	197,548		
1897	23,578,010	1,285,616	1,309,336	112,466		
1898	29,973,923	1,792,672	1,616,164	119,108		
1899	28,647,410	1,923,259	1,965,559	156,770		
1900	26,780,986	2,104,818	448,769	37,049	208,399	15,856
1901	33,482,368	2,549,853	1,234,942	97,522	56,048	5,023
1902	27,323,930	2,489,217	997,655	108,364	39,982	3,726
1903	26,505,588	2,526,067	2,912,098	297,942	20,340	2,034
1904	26,762,120	2,090,883	2,006,507	193,348	48,100	4,835
1905	23,769,743	1,872,483	2,373,249	207,170	11,300	1,045
1906	37,959,599	3,152,001	2,570,145	216,284	39,197	3,816
Italy:						
1890						
1891						
1892	34,000	3,400				
1893						
1894						
1895			100	9		
1896						
1897						
1898	6,041	420	900	116		
1899	82,252	4,740	29,962	2,900		
1900	250	15			1,400	90
1901	617,947	42,721			1,444	100
1902	2,243,550	210,687	69,844	6,615		
1903	604,463	51,030				
1904	1,284,012	87,083			37,749	3,671
1905	1,039,857	69,928			12,210	1,062
1906	2,470,293	199,070			6,200	604
Netherlands:						
1890	52,236,964	4,899,674	124,700	17,405		
1891	58,716,497	5,759,672	553,718	83,058		
1892	58,952,145	5,686,497				
1893	74,221,305	7,272,618	174,930	21,000		
1894	74,248,165	7,124,442				
1895	42,009,399	3,907,712	4,139,363	370,576		
1896	61,575,305	5,056,488				
1897	70,988,741	4,375,564				
1898	81,451,126	4,878,184	973	129		
1899	86,452,770	5,514,523				
1900	85,976,848	5,912,334			361,387	29,180
1901	85,442,112	6,131,071			115,580	10,163
1902	68,884,209	6,042,590	743,275	73,800	132,800	9,596
1903	68,047,606	6,597,761	989,603	103,658	125,700	10,995
1904	99,419,657	7,836,956	793,579	75,470	161,550	16,130
1905	81,843,126	6,517,825	572,624	50,211	142,700	14,254
1906	115,763,237	9,591,108	396,241	35,601	138,999	13,201
Norway and Sweden:						
1890	276,500	26,147	223,730	23,583		
1891	1,800,834	172,016				
1892	1,884,279	175,591	78,658	9,150		
1893	1,920,899	168,272	46,743	5,935		
1894	3,066,833	289,666				
1895	2,356,770	214,836	1,300	143		
1896	4,002,473	348,462	313,338	27,092		

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Oil, oleo.		Oleomargarin.		Pork, canned.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Norway and Sweden—Continued.						
1897	5,625,418	$295,319				
1898	6,552,690	372,912				
1899	12,054,375	788,862	40,896	$2,863		
1900	13,500,332	960,047	17,990	1,400	16,700	$960
1901	17,059,746	1,224,334	16,710	1,499		
1902	13,614,461	1,073,412			5,216	456
1903	13,149,262	1,074,245	189,210	18,745	52,907	4,450
1904	15,933,784	1,163,745	510,735	47,521	31,680	2,890
1905	12,431,367	925,771	1,903,286	161,387	43,738	4,110
1906	18,837,270	1,536,221	803,570	69,491	13,100	1,340
United Kingdom:						
1890	2,452,951	238,387	165,477	15,391		
1891	2,460,200	238,449	5,448	544		
1892	6,629,411	669,819	6,928	878		
1893	5,502,077	553,980	12,192	1,518		
1894	9,520,217	966,187	57,295	7,426		
1895	6,809,688	623,145	1,193,259	115,924		
1896	8,701,258	664,943	239,447	24,730		
1897	7,396,744	450,015	264,595	26,157		
1898	8,846,727	521,420	317,410	30,005		
1899	7,393,110	452,239	307,798	24,636		
1900	7,265,764	512,745	364,712	34,074	6,229,367	494,730
1901	9,557,733	717,056	148,505	14,710	7,150,283	573,412
1902	8,024,899	755,525	131,292	14,433	7,767,206	672,175
1903	5,783,291	564,069	136,864	15,278	11,609,415	1,163,260
1904	8,014,747	622,091	119,243	13,871	7,576,450	770,468
1905	13,481,667	1,081,825	337,292	32,767	8,972,370	863,703
1906	14,038,714	1,189,669	554,925	50,076	9,939,854	944,193

Country and year ending June 30—	Pork, cured: Bacon.		Pork, cured: Hams.		Pork, cured: Salted or pickled.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Total, all countries:						
1890	531,899,677	$39,149,635	76,591,279	$7,907,125	79,788,868	$4,753,488
1891	514,675,557	37,404,989	84,410,108	8,245,685	81,317,364	4,787,343
1892	507,919,830	39,334,933	76,856,559	7,757,717	80,336,481	4,792,049
1893	391,758,175	35,781,470	82,178,154	9,933,096	52,459,722	4,116,946
1894	416,657,577	38,338,843	86,970,571	9,845,062	63,575,881	5,067,773
1895	452,549,976	37,776,293	105,494,123	10,960,567	58,266,893	4,138,400
1896	425,352,187	33,442,847	129,036,351	12,669,763	69,498,373	3,973,461
1897	500,399,448	34,187,147	165,247,302	15,970,021	66,768,920	3,297,214
1898	650,108,933	46,380,918	200,185,861	18,987,525	88,133,078	4,906,961
1899	562,651,480	41,557,067	225,846,750	20,774,084	137,197,200	7,917,066
1900	512,153,729	38,975,915	196,414,412	20,416,367	133,199,683	8,243,797
1901	456,122,741	37,499,026	216,571,803	22,842,778	138,643,611	9,926,633
1902	383,150,624	35,449,797	227,653,232	25,222,744	115,896,275	10,117,562
1903	207,336,000	22,178,525	214,183,365	25,712,633	95,287,374	9,959,762
1904	249,665,941	24,446,752	194,948,864	22,293,867	112,224,861	9,527,388
1905	262,246,635	25,428,961	203,458,724	21,562,204	118,887,189	9,412,034
1906	361,210,563	35,845,793	194,267,949	20,075,511	141,820,720	11,681,634
Austria-Hungary:						
1890						
1891						
1892						
1893						
1894						
1895						
1896	3,000	240				
1897	77,740	3,555				
1898	2,584,462	156,344	53,666	5,368	27,925	1,117
1899	3,342,457	218,611	32,325	3,012	21,919	1,250
1900	143,000	8,852	5,300	482		
1901	38,750	2,647				
1902						
1903	38,750	4,000				
1904	429,356	37,611	5,270	528	74,329	5,203
1905	450,369	36,549	20,000	2,200	43,683	3,332
1906	748,388	73,749			112,202	7,918
Belgium:						
1890	36,730,616	2,565,431	5,038,418	532,334	379,600	26,818
1891	38,933,339	2,788,363	7,367,498	715,562	162,842	9,756
1892	46,301,069	3,554,187	5,293,388	526,552	447,015	29,874

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Pork, cured: Bacon.		Pork, cured: Hams.		Pork, cured: Salted or pickled.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Belgium—Continued.						
1893	25,730,586	$2,284,979	1,701,005	$200,120	71,880	$7,043
1894	25,791,188	2,182,653	970,267	117,227	108,800	10,338
1895	38,323,194	3,158,724	1,703,769	180,699	258,000	20,792
1896	20,167,668	1,428,536	11,137,184	1,091,822	348,000	23,400
1897	25,578,760	1,534,617	13,668,788	1,341,852	333,146	19,730
1898	47,386,442	2,992,652	16,461,853	1,584,463	2,322,623	129,708
1899	29,519,843	1,964,478	14,984,833	1,372,336	9,586,676	570,259
1900	27,812,949	1,835,808	8,570,337	809,869	7,058,823	417,878
1901	20,099,396	1,502,644	6,353,623	621,910	6,092,173	418,880
1902	21,361,704	1,941,997	6,648,096	674,814	6,047,148	520,219
1903	11,349,214	1,131,406	3,814,913	411,308	3,915,839	402,417
1904	11,998,294	1,031,444	5,780,382	599,376	5,273,731	457,347
1905	12,554,170	1,177,976	5,673,620	586,358	3,109,683	221,728
1906	23,261,441	2,133,393	3,608,181	387,391	5,640,813	418,616
British West Indies:						
1890	509,737	39,518	388,584	49,743	7,626,091	473,982
1891	627,600	47,544	380,263	46,362	8,231,119	499,247
1892	355,367	26,057	314,899	38,240	9,432,375	561,844
1893	121,655	10,032	352,722	48,375	7,845,204	629,218
1894	179,861	15,443	347,153	47,872	8,860,180	715,163
1895	184,252	15,432	412,126	46,094	7,469,033	535,700
1896	235,323	19,199	553,128	59,120	11,768,225	651,267
1897	192,087	13,702	672,244	62,209	8,475,000	366,246
1898	314,934	23,652	921,375	79,812	9,154,858	488,170
1899	358,427	23,202	984,977	83,617	8,776,020	476,089
1900	89,784	8,273	853,542	82,458	7,499,946	401,978
1901	145,350	13,968	897,485	89,591	8,208,356	535,241
1902	97,369	11,457	850,927	95,229	5,848,585	506,693
1903	80,262	11,239	790,805	103,788	5,437,471	558,862
1904	67,289	8,702	846,392	98,018	6,981,915	542,604
1905	128,126	13,348	802,234	85,771	5,791,938	424,197
1906	117,426	12,043	681,663	79,095	5,981,637	426,200
Canada:						
1890	11,592,384	701,085	1,576,716	146,895	24,833,732	1,334,208
1891	16,299,405	1,004,367	2,431,120	228,638	15,969,901	867,323
1892	11,041,833	783,831	4,032,785	399,466	15,026,117	835,628
1893	3,297,689	283,230	381,784	46,801	6,255,307	455,188
1894	10,268,250	835,049	874,424	94,363	7,954,456	604,938
1895	5,295,792	428,226	1,895,432	200,631	5,965,523	408,704
1896	7,032,056	422,214	3,642,274	359,138	10,448,971	585,220
1897	10,791,311	540,730	2,994,543	294,781	8,936,121	398,653
1898	19,697,252	1,267,043	5,736,424	508,650	12,691,511	699,670
1899	9,754,395	600,464	5,808,475	499,832	14,139,843	778,717
1900	2,296,937	193,309	1,839,604	188,944	6,315,933	346,522
1901	4,362,035	423,685	2,525,042	276,941	6,372,253	426,167
1902	5,732,480	617,471	3,107,179	336,109	6,963,627	519,724
1903	4,134,790	469,489	7,583,021	880,188	5,924,180	563,009
1904	5,442,302	606,584	5,861,150	703,834	7,409,485	550,001
1905	2,453,399	266,162	2,399,615	292,538	6,524,925	456,020
1906	2,415,544	291,131	3,293,664	404,515	12,369,869	919,364
Cuba:						
1890	4,381,370	290,209	2,027,956	260,592	570,600	34,300
1891	5,423,621	351,955	2,141,208	234,458	547,160	33,315
1892	6,612,210	453,624	4,766,133	529,328	696,800	43,911
1893	6,977,298	556,747	5,834,286	761,082	685,810	59,276
1894	6,154,077	532,035	5,272,640	668,959	626,033	52,333
1895	5,137,535	390,454	3,929,994	420,215	462,640	32,586
1896	6,168,201	386,475	3,408,718	348,065	195,600	10,286
1897	10,581,819	574,402	4,012,433	374,185	222,660	10,005
1898	10,736,382	672,008	3,532,940	365,243	267,600	14,103
1899	11,353,301	643,381	6,229,486	559,584	747,166	39,186
1900	12,308,661	777,045	7,087,793	676,908	6,387,997	407,527
1901	5,687,413	456,456	6,479,986	613,980	7,877,301	583,977
1902	4,111,136	364,536	5,576,814	554,590	5,689,291	485,514
1903	3,346,240	345,233	4,719,571	542,695	2,844,464	264,931
1904	3,534,713	307,773	5,050,919	522,842	3,282,669	244,219
1905	5,285,811	444,162	4,350,372	451,812	4,969,828	351,770
1906	5,134,061	445,306	4,377,030	520,582	8,385,430	635,735
Denmark:						
1890	857,015	61,975	.....	.....	.....	.....
1891	2,017,879	141,732	23,400	2,230	.....	.....
1892	1,102,512	78,926	.....	.....	24,000	1,454
1893	287,102	23,199	17,500	1,975	10,000	610
1894	712,865	58,223	53,268	6,508	20,000	1,430
1895	422,323	34,319	35,697	3,576	.....	.....
1896	211,225	16,413	52,775	5,123	.....	.....
1897	1,102,978	61,987	28,885	2,795	11,000	580

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Pork, cured: Bacon.		Pork, cured: Hams.		Pork, cured: Salted or pickled.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Denmark—Continued.						
1898	2,204,339	$142,790	387,361	$36,473	413,177	$23,454
1899	1,843,326	119,706	691,562	63,191	874,175	54.108
1900	716,290	46,510	159,263	15,462	763,257	44,901
1901	566,799	40,552	102,463	9,906	2,084,234	137,341
1902	417,130	33,511	464,000	47,200	734,120	60,455
1903	172,625	17,329	550,843	58,676	349.626	34,325
1904	362,200	33,408	985,419	102,890	742,908	63,645
1905	643,130	54,110	434,448	52,499	571,962	42,431
1906	2,758,807	255,329	1,045,766	99,089	1,246,798	94,283
France:						
1890	66,800	4,229	51,840	7,096	215,950	13,122
1891	31,970	2,300	33,305	3,959	184,400	12,179
1892	1,456,990	111,856	366,436	38,281	316,780	20,310
1893	12,230	993	100,317	11,157	8,000	665
1894	663,049	54,641	129,442	14,223	150,250	11,716
1895	9,296,962	791,631	545,086	60,546	236,600	18,329
1896	3,613,704	281,616	607,524	60,190	180,200	11,875
1897	1,979,586	133,086	316,624	30,078	131,550	8,037
1898	2,370,965	165,925	1,182,618	117,513	112,900	5,670
1899	12,366,110	853,030	1,145,490	106,499	212,936	12,472
1900	12,221,663	797,991	1,718,333	167,579	76,230	4,387
1901	2,755,224	196,782	667,119	65,310	111,000	7,103
1902	845,484	75,048	180,041	18,572	59,000	4,870
1903	447,546	44,796	135,740	14,843	89,300	8,851
1904	912,638	92,769	34,175	3,865	89,837	8,220
1905	45,870	4,289	10,100	885	27,000	2,000
1906	112,712	10,933	20,604	1,719	41,200	3,190
Germany:						
1890	2,106,234	148,914	118,406	12,841	1,138,746	73,817
1891	5,773,738	394,531	455,775	46,385	2,460,942	137,492
1892	15,717,046	1,091,877	955,393	98,791	5,077,360	321,618
1893	8,106,499	678,237	898,804	91,805	709,900	55,414
1894	12,537,849	1,036,055	1,293,735	146,354	2,431,325	193,011
1895	13,160,325	981,591	1,977,568	216,620	2,149,850	144,169
1896	9,086,825	603,022	1,855,798	176,443	1,261,000	74,992
1897	26,878,289	1,572,234	2,943,983	268,216	1,902,637	101,639
1898	51,524,565	3,338,869	11,963,631	1,109,550	8,995,122	488,498
1899	36,014,178	2,520,225	9,813,118	903,010	15,515,225	824,018
1900	26,027,162	1,887,819	3,615,843	345,540	11,062,825	665,076
1901	18,394,390	1,386,055	2,156,643	218,758	9,830,423	655,697
1902	20,009,656	1,675,155	2,128,576	219,826	8,671,775	719,438
1903	13,705,305	1,339,119	1,143,210	116,658	2,896,130	270,437
1904	11,535,531	1,014,157	253,626	27,907	2,848,161	248,334
1905	9,234,069	825,342	309,037	33,425	3,591,450	288,765
1906	14,625,495	1,365,581	1,194,911	125,910	7,978,878	607,996
Italy:						
1890			6,028	670		
1891						
1892	54,180	3,042	670	70	5,000	265
1893			200	28	5,400	399
1894	24,610	2,250	3,600	400		
1895			20,915	2,300		
1896	11,124	590	542	60		
1897	176,674	10,106	40,559	3,893	19,000	955
1898	4,542,777	321,901	89,482	9,190	249,931	13,375
1899	12,435,593	852,405	187,960	19,200	383,973	22,523
1900	10,094,324	701,307	50,220	5,124	1,476,411	83,738
1901	5,252,175	370,096	395,959	35,679	1,355,446	90,034
1902	1,769,657	146,199	114,686	12,838	1,296,171	104,954
1903	1,835,831	179,106	1,194,827	142,086	3,091,051	314,737
1904	4,574,621	406,533	1,000,106	111,695	2,912,732	225,773
1905	1,977,113	185,202	250,700	26,135	2,262,109	165,228
1906	1,719,912	168,803	66,610	6,810	1,464,236	108,347
Netherlands:						
1890	11,689,418	834,997	255,698	30,210	54,000	3,465
1891	11,736,255	796,377	527,671	58,587	227,100	19,687
1892	11,680,497	862,438	1,556,667	157,811	2,100,959	126,909
1893	6,283,284	533,935	526,763	56,819	707,418	47,608
1894	7,739,164	646,206	540,914	65,779	925,300	72,729
1895	8,200,198	663,158	1,430,994	160,520	491,282	30,392
1896	8,383,390	571,509	946,592	108,065	249,688	16,742
1897	11,562,634	684,554	1,637,525	169,921	2,159,423	127,516
1898	20,688,357	1,397,164	2,607,275	230,712	9,166,034	549,998
1899	10,014,623	678,956	4,265,556	391,631	9,509,859	568,023
1900	7,876,459	528,314	2,215,122	208,141	6,929,890	433,491
1901	5,829,264	432,452	1,914,790	194,091	11,192,739	774,098
1902	5,736,628	499,230	2,271,815	233,515	8,277,773	714,704

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Pork, cured: Bacon.		Pork, cured: Hams.		Pork, cured: Salted or pickled.	
	Pounds.	Value.	Pounds.	Value.	Pounds.	Value.
Netherlands—Cont'd.						
1903	3,764,141	385,211	1,506,088	$158,022	2,767,981	$284,633
1904	2,142,374	205,610	881,183	95,438	2,053,035	186,335
1905	6,293,447	570,066	795,101	88,469	4,000,930	288,928
1906	11,714,345	1,030,010	1,249,730	114,974	6,176,762	473,148
Norway and Sweden:						
1890	6,709,728	429,593	.....	.....	137,400	7,374
1891	7,912,422	487,920	39,625	3,721	122,400	7,538
1892	2,710,201	167,353	5,900	590	333,800	20,840
1893	1,648,304	110,431	14,030	1,601	88,000	5,578
1894	3,458,191	277,218	36,957	4,096	135,400	10,271
1895	2,263,390	163,545	355,634	35,624	167,900	11,772
1896	5,671,146	368,143	13,064	1,290	255,517	14,145
1897	6,327,048	347,983	262,730	25,177	377,700	18,770
1898	5,000,989	317,797	291,992	25,977	1,342,669	70,102
1899	28,363,412	1,935,262	463,206	43,210	5,124,728	292,997
1900	11,488,396	770,020	235,679	24,476	2,988,100	205,883
1901	18,561,512	1,340,128	193,827	19,229	6,368,744	462,217
1902	8,515,807	738,659	317,264	34,244	4,111,229	349,324
1903	2,551,349	264,154	357,727	39,901	2,464,383	247,698
1904	8,497,654	747,601	410,630	45,685	4,598,784	408,973
1905	6,420,427	560,309	302,845	31,563	3,007,349	232,543
1906	13,553,750	1,256,826	351,605	38,269	3,590,768	279,532
United Kingdom:						
1890	450,466,037	33,546,022	64,878,007	6,567,515	16,843,194	1,036,866
1891	413,850,146	30,429,839	68,084,482	6,546,179	23,086,647	1,316,816
1892	402,091,132	31,441,698	56,340,665	5,590,136	15,362,173	966,336
1893	335,075,784	30,866,694	68,750,506	8,230,791	11,213,627	862,297
1894	334,985,389	31,366,843	73,994,248	8,230,787	13,132,207	1,069,193
1895	346,210,100	29,024,682	89,800,462	9,245,618	14,268,862	1,032,438
1896	344,271,223	27,746,893	103,165,961	10,066,718	11,996,511	750,774
1897	386,457,479	27,564,915	134,933,004	13,008,512	17,749,994	1,008,244
1898	473,201,692	34,919,807	153,549,559	14,567,748	20,299,852	1,248,451
1899	395,474,204	30,312,477	177,702,854	16,366,854	49,908,985	3,119,067
1900	393,680,472	30,881,840	165,761,659	17,428,345	56,165,271	3,744,359
1901	369,082,490	30,884,512	191,127,894	20,269,042	58,034,570	4,410,610
1902	310,380,793	28,927,610	202,390,263	22,569,633	54,487,290	5,005,663
1903	162,549,709	17,572,088	189,026,769	22,797,301	52,968,687	5,815,823
1904	196,822,713	19,589,374	169,703,849	19,460,406	58,477,491	5,236,881
1905	213,397,302	20,932,002	183,877,459	19,421,184	69,490,526	5,815,929
1906	280,280,628	28,277,030	173,926,165	17,752,836	73,526,635	6,533,048

Country and year ending June 30—	Pork, fresh.		Sausage and sausage meats.		Value of sausage casings.	Tallow.	
	Pounds.	Value.	Pounds.	Value.		Pounds.	Value.
Total, all countries:							
1890	279,463	$15,406	.....	.....	$697,772	112,745,370	$5,242,158
1891	818,875	56,358	.....	.....	841,075	111,689,251	5,501,049
1892	377,746	30,246	.....	.....	878,675	89,780,010	4,425,630
1893	912,644	79,317	.....	.....	1,409,280	61,819,153	3,129,059
1894	1,168,647	92,095	.....	.....	1,280,514	54,661,524	2,766,164
1895	818,581	60,660	.....	.....	1,581,891	25,864,300	1,293,059
1896	744,656	43,739	.....	.....	1,771,680	52,759,212	2,323,764
1897	1,306,424	94,816	.....	.....	1,514,651	75,108,834	2,782,595
1898	12,224,285	815,075	.....	.....	1,821,519	81,744,809	3,141,657
1899	41,310,364	2,722,661	.....	.....	1,671,052	107,361,009	4,367,353
1900	25,946,905	1,925,772	.....	.....	2,307,571	89,030,943	4,398,206
1901	30,728,586	2,424,537	9,799,106	$923,974	2,778,854	77,166,889	3,848,564
1902	44,171,674	3,652,464	7,137,297	726,437	1,795,044	34,065,758	1,924,571
1903	20,966,113	2,035,491	5,264,648	585,088	1,964,524	27,368,924	1,623,852
1904	18,633,820	1,669,818	5,562,349	602,528	2,353,167	76,924,174	3,801,302
1905	14,946,284	1,291,794	6,061,508	671,241	2,646,868	63,536,992	3,022,173
1906	13,444,438	1,261,412	7,926,786	881,686	2,572,479	97,567,156	4,791,025
Austria-Hungary:							
1890	.....	.....	.....	.....	.....	171,735	8,500
1891	.....	.....	.....	.....	.....	4,300	215
1892	.....	.....	.....	.....	.....	99,600	5,270
1893	.....	.....	.....	.....	.....	.....	.....
1894	.....	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	.....	.....	.....	.....
1896	.....	.....	.....	.....	1,106	556,107	29,605
1897	.....	.....	.....	.....	.....	1,996,257	73,128
1898	.....	.....	.....	.....	32	1,768,292	58,527
1899	.....	.....	.....	.....	.....	6,504,265	260,718
1900	.....	.....	.....	.....	570	1,094,427	54,908

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Pork, fresh.		Sausage and sausage meats.		Value of sausage casings.	Tallow.	
	Pounds.	Value.	Pounds.	Value.		Pounds.	Value.
Norway and Sweden—Continued.							
1901						520,988	$25,436
1902					$20		
1903					6,310		
1904					25,395	236,234	12,040
1905			15,025	$1,674	20,498	1,489,500	69,325
1906			84,986	8,790	9,720	6,607,232	324,692
Belgium:							
1890					18,784	2,682,302	128,152
1891					26,877	2,831,291	146,707
1892					19,965	3,231,468	155,922
1893					10,122	1,379,588	69,193
1894					6,410	2,138,219	107,822
1895					17,841	203,000	9,740
1896					15,073	833,171	35,110
1897					30,160	3,816,607	123,158
1898					22,423	3,494,980	122,146
1899					29,659	5,246,258	191,449
1900					25,848	3,351,959	155,246
1901			1,268,908	124,649	34,847	6,504,563	317,358
1902			669,945	65,787	21,545	1,292,824	72,115
1903			382,711	40,394	21,885	937,486	48,589
1904			408,668	43,633	27,284	3,183,796	158,713
1905	1,588	$159	577,995	64,030	41,220	3,142,813	148,816
1906			960,874	96,666	43,538	9,177,577	424,217
British West Indies:							
1890					318	70,836	4,622
1891	109	7			867	96,492	6,227
1892					934	55,481	3,925
1893	250	20			113	78,999	6,111
1894	251	28			49	130,932	8,902
1895	17	2			56	149,138	8,801
1896					18	198,204	10,183
1897					154	455,144	19,122
1898						427,485	18,291
1899	1,700	109			30	626,319	30,471
1900	513	52			23	390,894	22,038
1901			22,882	2,348	28	322,478	18,121
1902	6,800	578	19,224	2,264	11	210,010	15,297
1903	10,823	900	19,584	2,578		68,676	5,746
1904			45,043	5,438	141	89,610	6,145
1905			36,491	4,130		64,249	4,305
1906			42,310	4,684		58,202	3,715
Canada:							
1890	279,413	15,398			6,016	573,877	23,008
1891	47,151	2,179			4,380	1,577,469	64,719
1892	43,496	3,861			2,745	1,642,766	71,639
1893	11,524	1,009			5,560	523,480	26,416
1894	27,646	1,945			18,157	934,550	43,940
1895	66,789	3,847			23,552	529,710	25,184
1896	70,961	3,626			25,967	1,169,465	50,905
1897	18,915	1,049			35,144	76,013	2,382
1898	4,080	276			36,873	246,677	7,141
1899	7,204	493			22,017	596,155	16,748
1900	7,479	781			16,140	38,312	1,553
1901	9,717	811	98,170	8,701	19,255	18,171	835
1902	71,404	6,651	85,479	9,009	29,583	81,338	3,768
1903	72,040	6,723	56,248	6,706	30,600	71,974	4,071
1904	325,755	36,288	148,425	15,784	46,070	16,768	933
1905	42,063	4,731	180,344	19,114	41,286	71,151	2,878
1906	132,153	12,256	243,194	26,231	46,348	125,886	5,749
Cuba:							
1890						23,438	1,394
1891					400	40,268	2,068
1892						490,376	19,306
1893						717,506	29,674
1894						1,246,688	56,700
1895					38	802,425	35,432
1896						618,505	24,285
1897					529	566,729	20,958
1898					88	404,767	13,231
1899	5,600	280			194	497,920	19,165
1900	41,923	4,394				62,017	3,065
1901	21,076	3,596	1,349,369	127,107	101	82,411	4,160
1902	44,759	5,972	1,227,171	136,277	53	137,372	7,430
1903	58,142	5,085	1,015,570	115,416	115	143,360	8,232
1904	2,041	194	1,219,430	144,726	11	811,534	40,255
1905			2,025,586	221,828	77	202,146	10,489
1906	189,904	15,462	2,207,138	262,903	223	249,596	12,558

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Pork, fresh.		Sausage and sausage meats.		Value of sausage casings.	Tallow.	
	Pounds.	Value.	Pounds.	Value.		Pounds.	Value.
Denmark:							
1890						207,516	$10,177
1891					$6,951	1,138,975	58,306
1892						475,250	24,735
1893					1,500	93,800	4,885
1894					5,995	123,252	6,471
1895					3,031	608,450	31,121
1896					6,309	411,988	19,434
1897					6,982	61,805	2,283
1898					3,913	478,196	18,943
1899					18,398	1,209,129	48,731
1900					10,118	275,699	17,320
1901					10,880	39,648	2,019
1902					13,370	581,735	39,300
1903			55,000	$6,600	31,108	70,217	4,519
1904					30,499	227,402	11,280
1905			98,500	10,300	49,742	224,400	11,520
1906			121,000	11,400	55,322	109,214	4,763
France:							
1890					9,148	4,568,799	221,290
1891					10,562	11,078,666	548,330
1892					8,047	5,107,431	257,104
1893					51,188	8,413,395	426,619
1894					24,553	7,144,510	365,755
1895					47,565	847,759	42,573
1896					99,811	8,589,820	357,547
1897					75,521	18,823,183	675,424
1898					57,600	9,603,964	351,545
1899					48,832	15,803,083	616,048
1900					77,371	7,324,627	348,492
1901	925	$93	3,322,078	328,882	61,023	12,246,023	605,123
1902	19,000	1,880	3,012,060	313,316	67,487	2,830,542	157,177
1903			2,117,521	239,824	57,980	7,437,705	433,941
1904			1,784,674	184,336	51,847	9,089,713	463,514
1905			1,494,209	179,328	60,967	10,631,904	493,583
1906			2,350,343	264,352	50,001	18,693,257	881,916
Germany:							
1890					206,663	7,630,510	353,626
1891					235,575	12,003,022	594,536
1892					336,419	8,881,041	443,854
1893					537,526	6,034,293	298,315
1894					472,222	4,385,603	220,802
1895					594,060	2,558,308	121,390
1896					739,075	6,983,531	297,873
1897					581,113	9,277,703	336,545
1898	621,917	36,361			718,571	11,195,548	445,231
1899					710,307	16,895,589	677,487
1900					931,462	10,802,572	524,686
1901			697,629	68,198	1,143,279	10,321,084	516,498
1902			9,720	950	599,820	5,358,659	300,570
1903					748,224	3,395,212	229,621
1904					923,006	12,359,585	613,651
1905					1,104,643	4,979,691	244,842
1906	74,849	6,364	11,790	1,149	976,069	8,679,492	444,475
Italy:							
1890					425	4,336,366	192,742
1891					418	6,857,523	337,183
1892						3,545,343	166,572
1893					3,107	1,466,484	65,524
1894					400	1,863,637	89,014
1895					4,973	58,074	2,642
1896					4,707	1,496,955	62,005
1897					2,888	4,947,230	188,425
1898					4,038	1,604,339	56,430
1899					4,080	4,558,196	181,252
1900					5,632	2,847,854	134,366
1901			66,820	6,525	6,413	1,537,773	83,047
1902			544	60	4,888	441,632	21,820
1903			3,120	372	4,400	875,506	52,303
1904			4,000	405	21,156	2,119,685	106,554
1905			12,085	1,228	27,101	1,609,650	80,948
1906			199,654	19,823	5,140	3,112,018	148,304

TABLE 7.—*Domestic exports of meat animals and packing-house products, by chief articles and by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Pork, fresh.		Sausage and sausage meats.		Value of sausage casings.	Tallow.	
	Pounds.	Value.	Pounds.	Value.		Pounds.	Value.
Netherlands:							
1890					$193,986	33,589,760	$1,500,073
1891					188,230	15,551,222	766,716
1892					180,604	21,722,609	1,096,038
1893					338,539	11,955,673	597,312
1894					301,287	11,192,045	562,211
1895					403,313	8,355,026	422,880
1896					427,701	4,845,526	251,355
1897	30,000	$3,000			423,792	2,701,543	114,617
1898	206,408	12,224			589,613	3,194,200	128,694
1899	501,821	34,402			512,122	8,593,364	361,322
1900					685,983	7,310,823	372,442
1901			972,357	$95,644	748,359	6,836,063	361,767
1902			172,315	17,310	473,223	5,111,309	284,130
1903			84,600	8,460	435,042	1,375,819	83,672
1904			51,500	5,170	560,400	2,878,238	146,621
1905	2,450	250	112,205	11,120	592,394	2,090,230	99,422
1906			141,095	13,705	705,390	2,752,690	142,569
Norway and Sweden:							
1890						227,750	10,460
1891						606,888	39,075
1892					3,406	425,220	28,918
1893					6,593	718,640	45,600
1894					11,676	276,903	16,951
1895					6,300	411,250	22,633
1896					13,746	531,029	23,898
1897					12,735	638,526	23,048
1898					7,181	106,711	5,097
1899					23,722	2,181,482	91,723
1900					19,511	4,846,545	223,871
1901			247,167	14,383	13,592	3,766,415	184,281
1902			58,150	5,147	15,501	2,210,041	112,639
1903			8,450	850	13,739	967,088	47,602
1904			61,320	6,100	61,738	1,913,327	80,212
1905			32,140	3,050	25,378	913,069	40,194
1906			3,500	350	40,222	197,204	10,008
United Kingdom:							
1890					178,579	51,029,819	2,403,913
1891	771,615	54,172			241,316	52,970,476	2,574,160
1892	334,200	26,381			221,428	38,160,366	1,837,808
1893	900,820	78,284			325,363	24,603,744	1,219,210
1894	1,140,750	90,122			302,431	19,170,283	949,909
1895	751,640	56,800			353,980	4,784,782	227,908
1896	673,695	40,103			282,507	18,987,338	796,875
1897	1,255,776	90,675			259,672	24,527,265	898,966
1898	11,391,880	766,214			278,152	41,661,299	1,598,528
1899	40,777,229	2,686,191			210,132	37,190,354	1,538,114
1900	25,896,990	1,920,545			368,875	43,514,592	2,163,258
1901	30,696,868	2,420,037	1,167,792	85,524	482,683	27,640,180	1,324,998
1902	44,017,247	3,636,200	983,429	75,530	416,884	9,687,352	535,912
1903	18,528,953	1,776,478	614,850	57,435	382,141	7,325,063	413,164
1904	13,999,651	1,200,855	614,027	57,566	321,102	37,224,218	1,797,264
1905	13,896,004	1,191,508	471,820	45,336	406,756	32,210,735	1,507,081
1906	12,580,875	1,175,520	562,637	55,941	354,551	37,888,851	1,885,773

FOREIGN PREFERENCES FOR FATS.

DIETARY AND CULINARY DEMANDS.

Familiarity with tables of exports of meat and its products leads to the discovery of a fundamental fact concerning the general character of these exports which seems to have escaped public attention. The United Kingdom is so dependent for its food upon foreign countries producing a food surplus and Canada is so nearly in a self-sufficient position that the exports to these two countries do not display the marked fundamental characteristic of the exports of

meat and its products found in the case of other countries; this characteristic is a predominance of fats, animal oils, and fat meats.

Table 8 has been prepared to bring out this fact. A total has been made of the values of grease and other soap stock, of lard, lard compounds, lard oil, oleomargarin, oleo oil, and other animal oils; of bacon, salted or pickled pork, and tallow. These, of course, are all foods except the grease and other soap stock, lard oil, and possibly some of the "other animal oils."

Upon reviewing the seventeen years covered by the table it will be noticed that these fatty commodities usually comprise in value from four-fifths to nine-tenths of the exports of meat and meat products from this country to Germany, Italy, and to Norway and Sweden; from two-thirds to four-fifths of the total in the case of France; and nine-tenths in the case of Austria-Hungary, Denmark, and the Netherlands. Great fluctuations are found in the case of some other countries, but in the more recent years Cuba has taken more than three-fifths of its imports of meat and meat products from the United States in the form of fatty commodities, Canada one-third to one-half, Belgium three-fourths, and the British West Indies three-fifths.

The food problem of the United Kingdom being different from that of other countries and all meats, fresh and cured, being admitted free, the fraction composed of the fatty articles is smaller than for the other countries mentioned; in 1890 this fraction was 45 per cent, but it declined to a percentage below 40 in 1896 and did not rise to that point again, going as low as 32 per cent in 1904.

It appears as a prominent fact, therefore, that the class of packing-house products composed of fats, animal oils, and fat meats is one that persists in the exports from this country, and if basic reasons were to be sought for this striking peculiarity of our export meat trade it is likely that they would be found to be dietary and culinary.

TABLE 8.—*Value of total packing-house fats and oils and fat meats*[a] *expressed as a percentage of the value of total exports of meat animals and packing-house products, by principal countries to which consigned, 1890–1906.*

Country and year ending June 30—	Percentage.	Country and year ending June 30—	Percentage.	Country and year ending June 30—	Percentage.
Total, all countries:		Austria-Hungary—Continued.		Belgium—Continued.	
1890	57.0	1894		1898	71.6
1891	55.8	1895		1899	72.3
1892	54.5	1896	78.5	1900	75.2
1893	56.6	1897	96.3	1901	81.1
1894	56.6	1898	97.3	1902	83.3
1895	53.8	1899	98.7	1903	80.6
1896	49.0	1900	95.7	1904	60.3
1897	46.3	1901	97.3	1905	70.4
1898	52.5	1902	88.5	1906	75.9
1899	53.9	1903	92.1	British West Indies:	
1900	51.7	1904	72.1	1890	59.4
1901	49.8	1905	93.6	1891	58.3
1902	51.8	1906	95.4	1892	68.9
1903	49.6	Belgium:		1893	72.9
1904	47.4	1890	80.8	1894	70.6
1905	49.3	1891	76.5	1895	69.0
1906	55.6	1892	84.3	1896	71.1
Austria-Hungary:		1893	87.0	1897	64.1
1890	96.8	1894	87.6	1898	65.2
1891	64.6	1895	85.5	1899	66.6
1892	56.7	1896	61.7	1900	59.9
1893		1897	60.7	1901	65.9
				1902	61.4

[a] Grease, etc.; lard, lard compounds, lard oil, oleomargarin, oleo oil, other animal oils; pork, cured, bacon; pork, cured—salted or pickled; tallow.

TABLE 8.—*Value of total packing-house fats and oils and fat meats expressed as a percentage of the value of total exports of meat animals and packing-house products, by principal countries to which consigned, 1890–1906*—Continued.

Country and year ending June 30—	Percentage.
British West Indies—Continued.	
1903	62.7
1904	60.6
1905	56.2
1906	54.5
Canada:	
1890	57.5
1891	61.4
1892	57.6
1893	48.7
1894	53.5
1895	41.0
1896	47.0
1897	38.9
1898	49.3
1899	54.2
1900	36.8
1901	38.2
1902	40.2
1903	55.7
1904	29.8
1905	35.2
1906	50.5
Cuba:	
1890	90.0
1891	90.2
1892	84.9
1893	83.9
1894	84.8
1895	83.8
1896	82.7
1897	80.2
1898	52.6
1899	45.3
1900	49.7
1901	60.2
1902	61.8
1903	65.6
1904	55.5
1905	58.7
1906	62.5
Denmark:	
1890	95.5
1891	87.5
1892	96.5
1893	95.0
1894	95.4
1895	92.7
1896	93.9
1897	91.8
1898	93.1
1899	85.8
1900	94.7
1901	94.7
1902	95.1
1903	91.2
1904	85.8
Denmark—Cont'd.	
1905	88.4
1906	87.1
France:	
1890	80.2
1891	78.2
1892	71.9
1893	75.5
1894	65.4
1895	63.4
1896	62.3
1897	77.5
1898	80.1
1899	85.6
1900	80.5
1901	79.4
1902	71.4
1903	74.8
1904	68.7
1905	73.6
1906	77.4
Germany:	
1890	86.0
1891	81.4
1892	84.2
1893	82.0
1894	83.6
1895	78.5
1896	77.1
1897	80.7
1898	82.9
1899	83.8
1900	85.5
1901	87.1
1902	89.4
1903	89.0
1904	89.3
1905	87.9
1906	86.7
Italy:	
1890	91.7
1891	92.0
1892	89.0
1893	64.3
1894	43.9
1895	24.9
1896	49.5
1897	75.3
1898	93.3
1899	94.7
1900	94.5
1901	90.6
1902	93.1
1903	81.6
1904	81.7
1905	90.6
1906	93.4
Netherlands:	
1890	94.7
1891	92.3
1892	93.4
1893	92.9
1894	94.4
1895	88.4
1896	89.0
1897	87.9
1898	88.3
1899	87.3
1900	88.2
1901	89.8
1902	92.7
1903	92.8
1904	90.5
1905	92.0
1906	92.6
Norway and Sweden:	
1890	80.0
1891	75.1
1892	86.0
1893	81.2
1894	84.8
1895	84.9
1896	87.6
1897	87.4
1898	92.2
1899	91.4
1900	91.9
1901	92.2
1902	90.0
1903	91.2
1904	89.0
1905	91.3
1906	90.6
United Kingdom:	
1890	45.4
1891	43.0
1892	40.1
1893	44.1
1894	42.5
1895	41.7
1896	37.6
1897	33.9
1898	39.9
1899	38.9
1900	38.3
1901	35.6
1902	37.5
1903	35.1
1904	32.2
1905	35.3
1906	39.8

MEAT IMPORTS.

SMALL AND SPECIALIZED.

The imports of packing-house products into the United States are small and in the aggregate consist mostly of specialties and a few commodities not sufficiently supplied in this country. The value of the packing-house products imported in 1906 was $96,000,000, and of this amount the foods were only $1,926,407, more than half of which was the value of sausages and sausage casings.

NUMBER OF MEAT ANIMALS EXPORTED.

OVER ONE-TENTH OF THE SUPPLY.

Departing now from further consideration of meat and its products as reported by customs officials, the purpose is to examine the exported fraction of the meat supply in the light of a special, laborious, and most thorough investigation of the subject conducted by the Division of Foreign Markets. In a subsequent part of this bulletin the character of this investigation will be explained, but it is here necessary to use some results in anticipation of the explanation.

The approximate average number of live meat animals exported annually during the years 1899–1901, after the subtraction of imports, was 240,000 cattle, not including calves, and 36,000 hogs, the sheep not being worth mentioning.

The exported meat has been reduced to terms of live animals in accordance with averages and fractions subsequently to be explained, and upon adding the computed animals to the live animals the total exports of live meat animals and of meat and meat products expressed in terms of live animals as for 1900 follow: Calves, practically none; cattle, except calves, 1,321,000; lambs, practically none; sheep, except lambs, 11,000; swine, 8,659,000; total meat animals exported, live and computed, 9,991,000.

Upon converting the foregoing numbers into percentages of the total number of animals available for slaughter in 1900, or the supply, it appears that the exported cattle, except calves, were 10.18 per cent of the supply; that the sheep, except lambs, were 0.09 of 1 per cent of the supply; that the swine were 17.27 per cent of the supply; and that, all animals being merged into one total, the exported number was 10.69 per cent of the supply.

The cattle, except calves, exported on the hoof in 1900 were 1.85 per cent of the number of cattle, except calves, in the meat supply of that year; the similar percentage for swine is 0.07 of 1 per cent, and for all meat animals constituting the supply 0.3 of 1 per cent. (See Table 10.)

TABLE 9.—*Number of meat animals exported and consumed in the United States, 1900.*

Class of animals.	Animals available for slaughter.	Live animals exported.	Exported meat reduced to live animals.	Total exported animals actual and computed.	Animals consumed in United States.	Percentage of available slaughter exported.
	Number.	*Number.*	*Number.*	*Number.*	*Number.*	*Per cent.*
Calves under 1 year	5,831,000	.....	.....	.....	5,831,000	.....
Cattle, except calves	12,978,000	240,000	1,081,000	1,321,000	11,657,000	10.18
Total cattle	18,809,000	240,000	1,081,000	1,321,000	17,488,000	7.02
Lambs under 1 year	12,765,000	.....	.....	.....	12,765,000	.....
Sheep, except lambs	11,783,000	.....	11,000	11,000	11,772,000	.09
Total sheep	24,548,000	.....	11,000	11,000	24,537,000	.04
Swine	50,145,000	36,000	8,623,000	8,659,000	41,486,000	17.27
Total	93,502,000	276,000	9,715,000	9,991,000	83,511,000	10.69

POUNDS OF MEAT EXPORTED.

ONE-EIGHTH OF THE SUPPLY OF 19,000,000,000 POUNDS.

The computation of the number of pounds of meat exported and of the fraction that the exported quantity is of the supply will be found in Table 10. The meat actually produced in 1900, in terms of dressed weight and weight of extra edible parts, exported live animals not included, was 19,012,570,000 pounds, of which 2,259,275,000 were exported, or 11.88 per cent. The percentage for beef, except veal, is 8.51; for mutton, except lamb, one-tenth of 1 per cent; for pork, including lard, 17.21 per cent.

The exported live animals have been converted to terms of meat in dressed weight and weight of extra edible parts, the grand total being 19,186,330,000 pounds, whereupon it appears that 10.44 per cent of the beef supply, not including veal, was exported in 1900; one-tenth of 1 per cent of the mutton supply, not including lamb, and 17.26 per cent of the pork supply, including lard.

The final objective point of the inquiry treated in Table 10 is to discover what fraction of the meat supply of the United States was exported in 1900. This fraction is established as 12.68 per cent, or almost exactly one-eighth.

TABLE 10.—*Percentage of meat supply exported, 1900.*

NUMBER OF ANIMALS.

Class of animals.	Number of animals—		Percentage exported, live.
	Slaughtered and exported.	Exported, live.	
	Number.	*Number.*	*Per cent.*
Calves under 1 year	5,831,000		
Cattle, except calves	12,978,000	240,000	1.85
Total cattle	18,809,000	240,000	1.28
Lambs under 1 year	12,765,000		
Sheep, except lambs	11,783,000		
Total sheep	24,548,000		
Swine	50,145,000	36,000	.07
Total	93,502,000	276,000	.30

MEAT SUPPLY, DRESSED WEIGHT AND EXTRA EDIBLE PARTS.

Class of meat.	Exported live animals not included.			Exported live animals included.		
	Total.	Exported.	Percentage exported	Total.	Exported.	Percentage exported.
	Pounds.	*Pounds.*	*Per cent.*	*Pounds.*	*Pounds.*	*Per cent.*
Veal	814,542,000			814,542,000		
Beef, except veal	7,788,721,000	662,855,000	8.51	7,956,721,000	830,855,000	10.44
Total beef	8,603,263,000	662,855,000	7.70	8,771,263,000	830,855,000	9.47
Lamb	498,546,000			498,546,000		
Mutton, except lamb	636,938,000	615,000	.10	636,938,000	615,000	.10
Total mutton	1,135,484,000	615,000	.05	1,135,484,000	615,000	.05
Pork, including lard	9,273,823,000	1,595,805,000	17.21	9,279,583,000	1,601,565,000	17.26
Total	19,012,570,000	2,259,275,000	11.88	19,186,330,000	2,433,035,000	12.68

FRACTION OF MEAT SUPPLY EXPORTED IN 1880, 1890, AND 1900.

LARGE INCREASE INDICATED.

Is the exported fraction of the meat supply increasing or diminishing? There are too many uncertain factors in the problem to permit an answer which is all that could be desired. The process of computing the answer must pursue so devious a way that the result can be nothing more than barely indicative.

The censuses of domestic animals in 1880 and 1890 probably excluded most of the sheep and cattle under 1 year of age, and in order that the census of 1900 may be comparable, the lambs and calves must be excluded.

The average dressed weight of adult meat animals, plus the weight of extra edible parts, as subsequently established, is, for cattle, 613.093 pounds; for sheep, 54.0557 pounds; for swine, 185.055 pounds.

After multiplying the foregoing weights into the number of census cattle, sheep, and swine for 1880, 1890, and 1900, and dividing the sum of the products by the sum of the weight, or 852.2037 pounds, the quotient expresses a number which may be regarded as the number of composite meat animals in stock at the dates mentioned.

In this way it is computed that the number of composite meat animals on farms and ranges in 1880 was 42,000,000; in 1890, 56,500,000; in 1900, 54,000,000.

As far as exports of meat and meat products are expressed in pounds in reports of the Bureau of Statistics of the Department of Commerce and Labor, it appears that the exports in 1880 were 1,340,000,000; in 1890, 1,466,000,000; in 1900, 2,209,000,000. These numbers are about one-tenth below the fact or, conversely, are about nine-tenths of the number of pounds of meat and its products exported, including that not reported in terms of pounds.

A ratio between the pounds of meat exported and the number of composite meat animals in stock may now be established, and this ratio is 31.9 pounds of exports on the average to one composite meat animal in 1880, 25.9 pounds in 1890, and 41 pounds in 1900.

The problem then progresses to this form: If 41 pounds of exports of meat from each composite meat animal in stock in 1900 are equal to 12.68 per cent of the meat supply exported (see Table 10), 25.9 pounds of exports per composite animal in stock in 1890 were equivalent to the answer sought, namely 8.01, which stands for the percentage of the meat supply of that year which was exported. By a similar process it is found that in 1880, 9.86 per cent of the meat supply was exported. The rough indication is that the fraction of the meat supply that was exported diminished somewhat from 1880 to 1890, but increased very largely from 1890 to 1900.

TABLE 11.—*Estimated fraction of meat supply exported in 1880 and 1890, compared with 1900.*

Year.	Composite meat animals in stock.	Exports of meat as far as expressed in pounds.	Exports per composite meat animal in stock.	Percentage of supply exported.
	Number.	*Pounds.*	*Pounds.*	*Per cent.*
1880	42,027,739	1,340,399,021	31.9	9.86
1890	56,536,713	1,465,658,188	25.9	8.01
1900	53,880,012	2,208,779,473	41.0	12.68

EXPORTED FRACTION OF LARD AND TALLOW.

PROMINENT PLACE OCCUPIED BY LARD.

The computed product of lard derived from the swine slaughtered in 1900 is 1,653,597,000 pounds, and the domestic exports under the name of lard were 636,586,000 pounds; so that an approximate consumption of 1,017,011,000 pounds is indicated, and a surplus for export which is 38.5 per cent of the production. This percentage is more than three times the exported percentage of all meat production which, as before stated, was 12.68 per cent for 1900. (See Table 27.)

The beef tallow production of 1900 computed upon the slaughter of that year was 716,168,000 pounds, of which 83,099,000 pounds were exported under the name of tallow. The national surplus of beef tallow was, therefore, about 11.6 per cent of the production, or a little under the general average for all meat and its products.

VOLUME OF PORK EXPORTS NEARLY SUSTAINED BY IOWA.

SWINE IN FARM ECONOMY.

Iowa farmers lead those of every other State in the number of swine kept, and by January 1, 1907, the number had increased to 8,584,500, or more than a million more swine than are kept in France, two-thirds as many as are in European Russia, and nearly half as many as are in Germany.

On subsequent pages is established the fraction that the slaughtered swine are of the total swine on hand in the United States and also the meat weight of slaughtered swine. With such approximate application as these national averages may have to Iowa conditions, the indicated production of pork, including lard, in Iowa in 1906 was 1,231,169,000 pounds. The total exports of pork, including lard, in 1907, as far as determined, weighed 1,348,214,000 pounds; so that the pork and pork products of Iowa in the most recent year were equal in weight to about 91 per cent of the entire exports of pork and its products in 1907.

MEAT ANIMALS EXPORTED PER CAPITA OF POPULATION.

SEVEN TIMES MORE SWINE THAN CATTLE.

Upon adding to the exported live cattle in 1900 the computed number of cattle indicated by the beef exports, the computed number of cattle represented by the exports is 1,321,000 (see Table 9), and the ratio of these exported cattle to the population was 0.017, or 0.078 per private family of 4.6 persons; that is to say, these are the fractions of a bovine animal (except calves) exported per capita and per family, respectively. Computed in like manner, the fraction of a hog exported in 1900 per capita of the population was 0.114, or per private family 0.524.

TABLE 12.—*Per capita slaughter and export of meat animals, 1900.*

Class of animals.	Animals per capita and per private family (4.6 persons).					
	Available for slaughter.		Exported.		Consumed in the United States.	
	Per capita.	Per private family.	Per capita	Per private family.	Per capita.	Per private family.
	Number.	*Number.*	*Number.*	*Number.*	*Number.*	*Number.*
Calves under 1 year	0.077	0.354	.....	.....	0.077	0.354
Cattle, except calves	.171	.787	0.017	0.078	.153	.704
Total cattle	.248	1.141	.017	.078	.230	1.058
Lambs under 1 year	.168	.773	.....	.....	.168	.773
Sheep, except lambs	.155	.713	(a)	(a)	.155	.713
Total sheep	.323	1.486	(a)	(a)	.323	1.486
Swine	.660	3.036	.114	.524	.546	2.512
Total	1.230	5.658	.131	.603	1.099	5.055

a Less than 0.0005.

STOCK OF MEAT ANIMALS.

NUMBER IN THE WORLD.

PLACE OCCUPIED BY THE UNITED STATES.

The number of meat animals in the world can not be determined with satisfaction, but an approximation can be attained which will indicate the relative standing of certain countries in the possession of the principal meat animals. A search long and thorough has been made in the Bureau of Statistics of this Department for the information contained in Table 13, wherein will be found the latest and most approved figures representing the number of cattle, goats, sheep, and swine in the world as far as known. The only kinds of animals included are those from which meat is derived in the United States.

It is to be understood that the grand totals are minimum numbers, since many minor countries are omitted and also a few countries in which there is a large number of meat animals.

With this understanding it appears that contiguous United States has 74,200,000 cattle of the 424,500,000 cattle known to be in the world, or 17.5 per cent. British India has a larger fraction, or 20.9 per cent, but the fraction is smaller than that of the United States in every other country—one-half or less.

This country does not figure so largely in comparison with the total sheep, since the number in contiguous United States is but 53,500,000 of the 609,800,000 sheep, or 8.8 per cent. This fraction is exceeded by that of three countries. Argentina has 19.7 per cent of the world's sheep as far as known; Australia has 12.2 per cent; and European Russia 9.7 per cent.

The greatest prominence of this country in the possession of a meat animal is found in the number of swine. Of the world's 141,300,000 known swine the United States has 56,600,000, or 40.1 per cent; Germany is the second country in order of importance, with 13.4 per cent; Austria-Hungary follows with 9 per cent; and European Russia with 8.4 per cent.

In the possession of goats this country occupies a small place, since the number on and off farms and ranges is only 2.2 per cent of the world's goats as far as known.

TABLE 13.—*Chief meat animals of the world.*

[Africa incompletely represented, through lack of statistics for large areas. Number of animals in China, Persia, Afghanistan, Korea, Bolivia, Ecuador, Salvador, and several less important countries unknown. For Brazil number of cattle alone estimated, but roughly.]

Country.	Cattle.		Goats.		Sheep.		Swine.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Algeria	1,066,404	0.2	4,030,208	4.4	9,062,636	1.5	91,267	0.1
Argentina	30,000,000	7.1	3,100,000	3.4	120,000,000	19.7	800,000	.6
Australia	8,525,025	2.0	84,338	.1	74,403,604	12.2	1,014,853	.7
Austria-Hungary	17,333,876	4.1	2,775,523	3.1	13,974,428	2.3	12,675,239	9.0
Belgium	1,788,328	.4	257,669	.3	235,722	(a)	1,046,519	.7
Brazil	30,000,000	7.1						
British India	[b]88,920,714	20.9	28,287,635	31.0	[d]21,266,729	3.5		
Bulgaria	1,596,267	.4	1,370,201	1.5	8,081,816	1.3	463,241	.3
Canada	7,262,148	1.7			2,971,212	.5	2,875,692	2.0
Cape of Good Hope	1,954,390	.5	7,162,463	7.9	11,818,829	1.9	385,945	.3
Colombia	2,800,000	.7	351,000	.4	746,000	.1	2,300,000	1.6
Denmark	1,840,466	.4	38,984	(a)	876,830	.2	1,456,699	1.0
France	14,315,552	3.4	1,476,957	1.6	17,783,209	2.9	7,558,779	5.4
Germany	19,331,568	4.6	3,329,881	3.7	7,907,173	1.3	18,920,666	13.4
Italy	[c]5,000,000	1.2	1,800,000	2.0	[c]6,900,000	1.1	[c]1,800,000	1.3
Japanese Empire	1,269,602	.3	189,335	.2	3,590	(a)	1,204,531	.9
Mexico	5,142,457	1.2	4,206,011	4.6	3,424,430	.6	616,139	.4
New Zealand	1,810,936	.4	9,055	(a)	19,130,875	3.1	249,727	.2
Philippine Islands	127,559	(a)	124,334	.1	30,428	(a)	1,179,371	.8
Portugal	817,000	.2	998,680	1.1	3,064,100	.5	1,200,000	.9
Roumania	2,545,051	.6	232,515	.3	5,655,444	.9	1,709,205	1.2
Russia, Asiatic	10,259,640	2.4	2,552,086	2.8	24,631,258	4.0	1,350,800	1.0
Russia, European	37,566,825	8.8	1,114,000	1.2	58,889,454	9.7	11,870,841	8.4
Spain	2,075,142	.5	2,385,664	2.6	13,025,512	2.1	1,743,863	1.2
Turkey and Crete	1,000,000	.2			10,000,000	1.7		
Turkey, Asiatic	3,000,000	.7	9,000,000	9.9	45,000,000	7.4		
United Kingdom	11,691,955	2.8			29,210,035	4.8	3,580,740	2.5
United States, on and off farms and ranges:								
Contiguous	74,150,422	17.5	1,948,952	2.2	53,471,301	8.8	56,612,114	40.1
Noncontiguous[e]	363,151	.1	16,644	(a)	108,461	(a)	74,247	(a)
Total United States	74,513,573	17.6	1,965,596	2.2	53,579,762	8.8	56,686,361	40.1
Uruguay	6,827,428	1.6	20,428	(a)	18,608,717	3.1	93,923	.1
Venezuela	2,004,257	.5	1,667,272	1.8	176,668	(a)	1,618,214	1.1
Other countries	31,913,075	7.5	12,611,651	13.8	29,348,399	4.8	6,834,980	4.8
Total	424,499,238	100.0	91,151,486	100.0	609,806,860	100.0	141,327,595	100.0

[a] Less than 0.05.
[b] Including buffalo calves.
[c] Data for 1890.
[d] Of which 373,003 in Alwar include goats.
[e] Includes Philippine Islands.

NUMBER IN THE UNITED STATES.

LATEST STATISTICS.

The latest statistics of the number of meat animals in this country will be found in Table 14, the noncontiguous parts of the United States not being included. The number of cattle on and off farms and ranges June 1, 1900, was 69,300,000, of which 18,100,000 were dairy cows and 51,200,000 were other cattle. The sheep numbered 61,700,000, the swine 64,700,000, and the goats 1,949,000. The total cattle, sheep, swine, and goats for 1900 is 197,700,000.

The estimates of the Bureau of Statistics of this Department of the number of animals on farms and ranges January 1, 1907, give 72,534,000 for all cattle, of which 20,968,000 were dairy cows, and 51,566,000 are other cattle. There are 53,200,000 sheep and 54,800,000 swine. The total of all animals, including the census number of goats, is 182,400,000 for farms and ranges; but it should be borne in mind that at the midwinter time, when these estimates are made, the number of sheep and swine is about 20 per cent below the number of the preceding June 1, for which date the census was taken in 1900.

TABLE 14.—*Total number of meat animals, 1900 and 1907, in contiguous United States.*

[Including calves and lambs under 1 year.]

Date.	Total.	Cattle.			Goats.	Sheep.	Swine.
		Total.	Dairy cows.	Other cattle.			
Census.							
1900, June 1:							
On farms and ranges	193,961,763	67,719,410	17,135,633	50,583,777	1,870,599	61,503,713	62,868,041
Off farms and ranges	3,744,190	1,616,422	973,033	643,389	78,353	231,301	1,818,114
Total	197,705,953	69,335,832	18,108,666	51,227,166	1,948,952	61,735,014	64,686,155
Department of Agriculture.							
1907, January 1:							
On farms and ranges	182,438,599	72,534,000	20,968,000	51,566,000	[a]1,870,599	53,240,000	54,794,000

[a] Census, 1900.

NOTE.—The number of sheep and swine, January 1, is about 20 per cent below the number of the preceding June 1.

CENSUS ENUMERATIONS, 1840-1900.

The first census to enumerate domestic animals was taken in 1840 and every national decennial census since that year has repeated the enumeration; but the figures do not include animals that are not on farms and ranges, nor goats, from 1840 to 1890. Table 15 exhibits the census number of cattle, sheep, and swine on farms and ranges, spring calves and lambs not included. The Bureau of the Census has established the numbers in each column of this table on substantially the same basis in order that they may be comparable with one another within each class of animals.

It appears then that the number of dairy cows increased from census to census and from 6,400,000 in 1850 to 17,100,000 in 1900. Other cattle have fluctuated from census to census; they numbered 11,400,000 in 1850, 41,100,000 in 1890, and 35,300,000 in 1900, a year when range cattle were giving way to farms. Sheep increased from 19,300,000 in 1840 to 42,200,000 in 1890, and declined to 39,900,000 in 1900; swine progressed decennially from 26,300,000 in 1840 to 62,900,000 in 1900, except that there was an apparent loss in 1870.

TABLE 15.—*Number of meat animals on farms and ranges, June 1, ascertained by census enumerations in contiguous United States.*

[Not including calves and lambs under 1 year.]

Census of June 1—	Cattle.			Sheep.	Swine.
	Total.	Dairy cows.	Other.		
1840	[a] 14,971,586			19,311,374	[a] 26,301,293
1850	[a] 17,778,907	6,385,094	[a] 11,393,813	21,723,220	[a] 30,354,213
1860	[a] 25,620,019	8,585,735	[a] 17,034,284	22,471,275	[a] 33,512,867
1870	[a] 23,820,608	8,935,352	[a] 14,885,276	28,477,951	[a] 25,134,569
1880	[b] 39,675,533	12,443,120	[b] 27,232,413	[b] 42,192,074	[b] 49,772,670
1890	[b] 57,648,792	16,511,950	[b] 41,136,842	[b] 40,876,312	[b] 57,426,859
1900[c]	52,403,828	17,135,633	35,268,195	39,852,967	62,868,041

[a] No separate report or estimate of range animals.
[b] Including estimated number of range animals separately reported.
[c] For purposes of comparison, spring calves and lambs are not included in the total numbers of neat cattle and sheep, respectively, for 1900. In 1850 they were excluded from reports by instructions to enumerators. For other census years, no instructions were given concerning them. It is probable that a few, but not all, were reported.

NUMERICAL RELATIONS OF THE CLASSES.

The composition of the stock of meat animals at the dates of the decennial censuses is worth analysis, and this will be found in Table 16. The total cattle, sheep, and swine is regarded as 100 per cent and, with this in mind, it appears that in 1840 the cattle were 24.7 per cent of the total of cattle, sheep, and swine, and in 1900, 33.8 per cent. The fraction standing for dairy cows was 9.1 per cent in 1850 and 11.0 per cent in 1900; for other cattle, 16.3 per cent in 1850 and 22.7 per cent in 1900.

Sheep were 31.9 per cent of the total of cattle, sheep, and swine in 1840 and declined with some fluctuations to 25.7 per cent in 1900. The decline for swine was from 43.4 per cent in 1840 to 40.5 per cent in 1900.

It appears, therefore, that cattle have gained relatively in the total of cattle, sheep, and swine, while sheep and swine have lost, but sheep have lost more in degree than swine.

If the relative positions of these various classes of animals in 1890 and 1900 are compared, it will be found that swine have made a distinctly relative gain, dairy cows a small gain, that other cattle have suffered a perceptible loss, and that in the case of sheep the decline which began after 1870 has nearly stopped.

TABLE 16.—*Relative composition of the stock of meat animals, 1840–1900.*[a]

[Not including calves and lambs under 1 year.]

Year.	Percentage.					
	Total.	Cattle.			Sheep.	Swine.
		Total.	Dairy cows.	Other.		
1840	100.0	24.7			31.9	43.4
1850	100.0	25.4	9.1	16.3	31.1	43.5
1860	100.0	31.4	10.5	20.9	27.5	41.1
1870	100.0	30.7	11.5	19.2	36.8	32.5
1880	100.0	30.2	9.5	20.7	32.0	37.8
1890	100.0	37.0	10.6	26.4	26.2	36.8
1900	100.0	33.8	11.1	22.7	25.7	40.5

[a] The footnotes of Table 15 apply.

MEAT ANIMALS COMPARED WITH POPULATION.

DECLINING RATIOS.

Is the stock of meat animals increasing? Absolutely, yes; but, relative to population, no. These animals are not maintaining their former ratio to population as indicated by any census. The census of 1870 was so defective that it must be placed entirely out of consideration, and besides that, the South had not recovered from the civil war sufficiently to make that year a normal one.

Table 17 has been prepared to compare the stock of meat animals with the population and is based upon Table 15. Cattle, sheep, and swine have been merged into a composite animal, as explained before, and the composite animals so computed are related to population as shown in the first column of Table 17. Therein it appears that there was 1.043 of a composite meat animal per capita of population in 1840. The ratio declined to 0.860 of a composite animal in 1860; to 0.838 in 1880; rose to 0.900 in 1890; but fell more decidedly to 0.709 of a composite animal per individual of population in 1900.

In the meantime exports of meat and its products have increased enormously, so that subtractions must be made from the foregoing averages certainly as far back as 1880 to arrive at the ratio of the consumption stock of meat animals to population. This has been done in the second column of Table 17. It is established in the present investigation that 12.68 per cent of the meat produced in 1900 was exported and by a series of computations in Table 11 it is indicated that the exported fraction in 1890 was 8.01 per cent and in 1880 probably 9.86 per cent.

Subtractions on account of exports have been made from the first column of Table 17 with results which show that the consumption stock of meat animals in this country as related to population has decreased in a marked degree. If 1900 is compared with any preceding census year (1870 is not to be regarded), the ratio of domestic consumption stock of meat animals to population is found to have fallen more than in a merely perceptible degree. For the purpose of indicating the fall in the ratio, the column headed "domestic consumption stock" has been converted into index numbers as shown in Table 17. The ratio of the consumption stock of meat animals to population for 1840 being placed at 100, it follows that the index number fell to 72.4 in 1880, followed by a rise to 79.4 in 1890, and a great fall to 59.3 in 1900. If 1880 be taken as the basis at 100, the increase in the index number for 1890 was to 109.7 and the fall for 1900 was to 82. From 1890 to 1900 the index number fell from 100 to 74.8; in other words, the domestic consumption stock of meat animals declined almost exactly one-fourth per capita of the population during the ten years from 1890 to 1900.

TABLE 17.—*Composite meat animal per capita, 1840–1900.*

[Cattle (except calves under 1 year), sheep (except lambs under 1 year), and swine, June 1, per capita, merged with relative proportions of 515, 52, and 160 pounds, dressed weight, respectively.]

Year.	Composite meat animal per capita.		Index numbers for consumption stock; comparison with—			
	Total stock.	Domestic consumption stock.[a]	1840	1860	1880	1890
1840	1.043	1.043	100.0	.....	.....	.....
1850	.901	.901	86.4	.....	.....	.....
1860	.860	.860	82.5	100.0	.....	.....
1870	.635	.635	60.9	73.8	.....	.....
1880	.838	.755	72.4	87.8	100.0	.....
1890	.900	.828	79.4	96.3	109.7	100.0
1900	.709	.619	59.3	72.0	82.0	74.8

[a] 9.86 per cent deducted from total stock for 1880, 8.01 per cent for 1890, and 12.68 per cent for 1900, for exports.

CATTLE, SHEEP, AND SWINE IN THE RELATIVE DECREASE.

Per capita ratios of cattle, sheep, and swine on farms and ranges, not including calves and lambs under 1 year, have been computed for each of the three classes named and for each of the seven national censuses with results that will be found in Table 18.

Leaving out of the question the census of 1870 as unworthy of consideration, it appears that the ratio of cattle to population since 1840 was lowest in 1900, although highest in 1890, which was in the great range period.

With regard to sheep the lowest ratio was in 1900, when it was less than one-half the ratio of 1840 and but little more than half the ratio of 1850.

The swine ratio to population was lowest in 1900 and presents an unbroken decline from 1840, 1870 being out of consideration.

TABLE 18.—*Number of cattle, sheep, and swine on farms and ranges, per capita, 1840–1900.*

[Not including calves and lambs under 1 year.]

Census of June 1—	Cattle.	Sheep.	Swine.
1840	0.88	1.15	1.54
1850	.77	.94	1.31
1860	.81	.71	1.07
1870	.62	.74	.65
1880	.79	.84	.99
1890	.92	.65	.92
1900	.69	.52	.83

MEAT PRODUCTION.

METHOD OF PROCEDURE IN ESTIMATING.

ORIGINAL AND BASED UPON COLLECTED INFORMATION.

An estimator of the meat production of a country in which the record of slaughtered animals embraces less than half of the slaughter is necessarily compelled to resort to an indirect process to arrive at the probable fact. A method that has been used assumes that the

known slaughter is a certain percentage of the total slaughter and, having answered the question by force of the assumption, one proceeds to compute the total slaughter. The total slaughter is established by the present investigation and the known slaughter is reported by the Cincinnati Price Current. Upon correlating these two facts it appears that the known slaughter of cattle was about two-fifths of the total slaughter of cattle, except calves, and a little more than one-fourth of the total slaughter of cattle and calves in 1900; that the known slaughter of sheep and lambs was about one-third of the total slaughter of sheep and lambs; that the known slaughter of swine was about three-fifths of the total slaughter of swine. The average for cattle (except calves), sheep, and swine, is 48 per cent. But in this case the ratios are the result of computations made after the total slaughter has been established. (See Table 33.)

The processes employed, for the purposes of this bulletin, in arriving at the number of animals slaughtered and the quantity of meat produced in 1900 were entirely uninfluenced by methods adopted by others; indeed, an examination of other methods was purposely avoided in order that the problem might be solved in accordance with the nature of its elements, as might not have been the process if the devices of others under other circumstances had been adopted. After the work had been done, the reports of the committee appointed by the Royal Statistical Society of London to investigate the meat production and consumption of the United Kingdom were studied and some remarkable similarities were found to exist between the method adopted in this investigation and the method followed by that committee.

The year 1900 was selected for estimating the slaughter and meat production, partly because it was the latest census year and particularly because the census report on Agriculture contains the only statement of the number of animals by ages and, to an important extent, by sex.

ESTABLISHING THE FACTORS.

For the purpose of establishing the required percentages and averages to be used in estimating slaughter and meat production, information of a sort which no one had heretofore procured and published was obtained by sending a large number of circulars containing questions to slaughtering and packing houses, large and small, to live-stock commission men, to large breeders and feeders, to range men, and to other persons who, it was known, had special information relating to the inquiries. These circulars went to all sections of the country and upon their return the answers were aggregated, weighted according to the importance of the different sections of the country, and properly averaged for use in the succeeding steps of the investigation. The questions of the circular follow:[a]

[a] This circular was prepared by Nat C. Murray, now assistant statistician of this Bureau, who, at the time the circular was issued, was special field agent of this Bureau for the collection of information relating to crops and domestic animals; his official experience and his previous service for the Cincinnati Price Current guarantee that the reports to the inquiries of the circular were handled sensibly and in accordance with the actual and variable conditions applying to meat animals and slaughter in the different parts of the United States.

INQUIRIES CONCERNING FECUNDITY, AGES, WEIGHT, MARKETING, AND LOSSES.

Cattle.

(1) Average number of calves dropped in a year for each 100 cows.
(2) What per cent of the total births occur in seasons indicated:
Spring (March, April, May).
Summer (June, July, August).
Autumn (September, October, November).
Winter (December, January, February).
If practicable give per cent in each month of year's total births.
(3) What per cent of calves die before 1 year old, from exposure, disease, or otherwise than slaughter?
(4) What per cent of total supply is marketed for slaughter under 1 year old?
(5) Average weight per head of calves (cattle under 1 year old) marketed for slaughter?
(6) What per cent of the total number of cattle 1 year old and over, marketed for slaughter, are of the following classes, and what is the average weight of each class:
Steers, 1 and under 2 years.
Steers, 2 and under 3 years.
Steers, 3 and under 4 years.
Bulls, 1 year and over.
Heifers, 1 and under 2 years.
Cows, 2 years and over.
(7) Average weight per head of all cattle 1 year old and over marketed for slaughter.
(8) Average weight of meat product per calf (cattle under 1 year); or what per cent of the live weight is meat product?
(9) Average weight of meat product per head of cattle (over 1 year old); or what per cent of the live weight is meat product?
(10) How does the number of cattle (including calves) on farms about June 1 of any year compare with the number on farms about January 1?

Hogs.

(1) What per cent of the total number of pigs born in a year are farrowed in seasons indicated:
Spring (March, April, May).
Summer (June, July, August).
Autumn (September, October, November).
Winter (December, January, February).
If practicable, give per cent in each month of year's total births.
(2) What is the average loss per 100 hogs (all ages) by exposure, disease, or otherwise than slaughter?
(3) What is the average number of pigs in a litter?
(4) Of the total number of all ages on farms about June 1, what per cent are brood sows?
(5) Average number of pigs raised in a year per 100 brood sows.
(6) Average number of years sows are kept for breeding.
(7) What is the average age of hogs at time of marketing for slaughter?
(8) What is the average weight of hogs at time of marketing for slaughter?
(9) Average number of pounds of meat (including lard) product per head; or what per cent of live weight is meat product?
(10) How does the number of hogs (of all ages) on farms about June 1 of any year compare with the number on farms January 1?

Sheep.

(1) Average yearly number of lambs born per 100 ewes.
(2) Average loss by exposure, disease, or otherwise than slaughter.
(3) What per cent of total births occur in seasons indicated:
Spring (March, April, May).
Summer (June, July, August).
Autumn (September, October, November).
Winter (December, January, February).
(4) What per cent of total supply is marketed for slaughter under 1 year old and what is the average weight?

(5) Average age of sheep marketed for slaughter over 1 year old and what is the average weight?
(6) Average number of pounds of meat product per lamb (all under 1 year old); or what per cent of live weight is meat product?
(7) Average number of pounds of meat product per sheep (all over 1 year old); or what per cent of live weight is meat product?
(8) How does the total number of sheep (all ages) on farms about June 1 of any year compare with the number on farms about January 1?

SLAUGHTER OF CALVES.

ESTIMATED TO HAVE BEEN 5,831,000 IN 1900.

In consequence of the information derived from replies to the foregoing widely-distributed circular certain necessary factors were established with fairly satisfactory precision. There was close agreement of returns that about 75 calves are dropped in every year to every 100 cows, and it is confidently believed that this number is within 3 per cent, at the most, of the actual number of calves produced.

The estimates of loss of calves varied mostly between 5 and 15 per cent of the total production and the average is about 8 per cent.

During the period around about 1900 there was an accumulation of cattle going on, so that the production was exceeding the current consumption. From the marketing at about that time it is estimated that the production exceeded the current consumption by about 6 per cent.

The proportion of calves which are marketed as veals under 1 year of age varies considerably in different portions of the United States, but the general average derived from a proper weighting of the different sections is 31 per cent. The computation of the number of slaughtered calves is based upon the 29,000,000 cows of the census and the resulting figures are expressed in Table 19.

TABLE 19.—*Computation of slaughtered calves, 1900.*

Item.	Number.
Number of cows (census 1900)	29,000,000
Calves dropped, 75 per 100 cows	21,750,000
Losses of calves, 8 per cent	1,740,000
Remainder	20,010,000
6 per cent deducted for increase	1,201,000
Remainder	18,809,000
31 per cent deducted for veals (calf slaughter)	5,831,000
Remaining to be slaughtered when over 1 year old (see Table 20)	12,978,000

NOTE.—The percentage of calves slaughtered is reported as follows: North Atlantic States, 73 per cent; South Atlantic, 12 per cent; North Central, 35 per cent; South Central, 20 per cent; Western, 10 per cent; weighted average for the United States, 31 per cent.

CATTLE SLAUGHTER.

ESTIMATE FOR THE CENSUS CLASSES.

If 31 per cent of the 18,809,000 calves remaining for consumption after deducting allowances for losses and for increase of stock are consumed as veals under 1 year old, there are left 12,978,000 calves to be slaughtered or exported some subsequent year as beeves.

The inquiries made to determine the distribution of the beeves slaughtered among the different classes of animals enumerated in the census resulted in percentages that may be found in Table 20. It is determined that of the total beef slaughtered 13 per cent were steers between 1 and 2 years old, 18 per cent steers between 2 and 3 years; 17 per cent steers 3 years and over; or for the three classes of steers 48 per cent of the total beeves slaughtered. For bulls 1 year and over the percentage is 5; for heifers between 1 and 2 years, 13 per cent; and for cows 34 per cent.

TABLE 20.—*Computation of slaughtered cattle, except calves, 1900.*

Item.	Per cent.	Number.
Total slaughtered (see Table 19)	100	12,978,000
Steers, 1 and under 2 years	13	1,687,000
Steers, 2 and under 3 years	18	2,336,000
Steers, 3 years and over	17	2,206,000
Total steers	48	6,229,000
Bulls, 1 year and over	5	649,000
Heifers, 1 and under 2 years	13	1,687,000
Cows	34	4,413,000

SLAUGHTER OF LAMBS AND SHEEP.

NUMBERS NEARLY EQUAL.

Estimates of the average number of lambs produced in a year per 100 ewes vary mostly between 80 and 100, the average being about 95. The losses from various causes are estimated mostly between 10 and 20 per cent and the average is approximately 15 per cent.

At the time of the 1900 census there was some increase in the number of sheep and the reports received in response to the circular before mentioned indicate that 5 per cent of the lambs should be deducted for increase of stock.

The foregoing allowances leave for slaughter 24,548,000 lambs, and the consensus of experience and information is that about 52 per cent of these were slaughtered as lambs, leaving 48 per cent to be slaughtered subsequently as sheep.

TABLE 21.—*Computation of slaughtered lambs and sheep, 1900.*

Item.	Number.
Based upon ewes (census 1900)	32,000,000
Lambs dropped, 95 per 100 ewes	30,400,000
Losses of lambs, 15 per cent	4,560,000
Remainder	25,840,000
5 per cent deducted for increase	1,292,000
Remainder	24,548,000
52 per cent slaughtered as lambs	12,765,000
48 per cent slaughtered as sheep	11,783,000

SWINE SLAUGHTER.

NUMBER ESTIMATED AT 50,145,000.

General experience and estimate indicate that about 15 per cent of the swine on hand June 1, 1900, were brood sows and also establish an average of 640 pigs yearly to each 100 sows. It is to be understood in arriving at the average of 640 pigs per 100 brood sows per year that consideration was given to the dropping of two litters in a year by some sows and to the losses from the litter before the termination of suckling. Some responses to the circular previously mentioned estimated a large number of pigs to a litter, but also a large mortality before weaning, while other reports estimated a smaller litter and smaller mortality. The subtraction of losses before weaning should be remembered by anyone who undertakes to compare the production of 640 pigs per 100 brood sows, herein established, with any statistics or estimates of fecundity.

The losses of pigs by disease and from other causes after weaning apparently amount to 15 per cent of the 640 surviving pigs, as above explained, and a further deduction of about 5 per cent should be made for the increase of stock.

TABLE 22.—*Computation of slaughtered swine, 1900.*

Item.	Number.
Based upon total swine (census 1900)	64,686,000
15 per cent brood sows	9,703,000
640 surviving pigs per 100 brood sows	62,099,000
Losses of pigs, 15 per cent	9,315,000
Remainder	52,784,000
5 per cent deducted for increase	2,639,000
Total slaughtered	50,145,000

SUMMARY OF NUMBER OF SLAUGHTERED ANIMALS.

SMALL CONTRIBUTION BY GOATS, GAME, AND HORSES.

The way is now clear to establish the number of pounds of meat produced in 1900, and the details may be found in Table 23. The number of cattle, sheep, and swine on and off farms and ranges, according to the census of 1900, constitute the stock of meat animals from which the meat product of this investigation is derived.

Practically no estimate of meat production from goats and game can be made. A small proportion of the goats are family pets, and a considerable fraction of goats die without slaughter and are not eaten. The goats of the country are kept under such diverse conditions, and generally not primarily for meat, that it is impossible to make a satisfactory estimate of their meat product. It is positive that the actual meat product per goat in stock is much less than the product per sheep.

The amount of game meat eaten is so small that it would make no perceptible addition to the grand total of meat production by cattle, sheep, and swine. The horse meat eaten in two or three cities is

not important enough to be worth a space in a table. Of course poultry is not included, because its flesh is not regarded as "meat."

Preceding a statement of the pounds of the meat supply the numbers of the animals constituting the supply are summarized.

CALVES AND CATTLE.

On referring to Table 23 it will be observed that the computations previously explained in detail indicate an available slaughter of 5,831,000 calves in 1900, of 6,229,000 steers, of 649,000 bulls over 1 year old, of 1,687,000 heifers, and of 4,413,000 cows. The number of cattle available for slaughter, not including calves, was 12,978,000, of which 240,000 were exported alive, so that the cattle, except calves, slaughtered in this country was 12,738,000. If to this number the slaughtered calves be added, the total slaughter of cattle was 18,569,000; and, if to this number we add the number exported alive, we have a grand total of 18,809,000.

LAMBS AND SHEEP.

The slaughtered lambs of 1900 numbered 12,765,000 and the slaughtered sheep, not including lambs, 11,783,000. There were no net exports, and the total slaughter of lambs and sheep was 24,548,000.

SWINE.

The net exports of live swine for 1900 were about 36,000, and the swine slaughtered in this country was 50,109,000, so that the number of swine slaughtered and exported was 50,145,000.

ALL ANIMALS.

The stock of meat animals—that is, of cattle, sheep, and swine—in 1900 (census) was 195,757,000, and the number available for slaughter during the year was 93,502,000, of which 276,000 represent the net exports of live cattle and hogs intended for slaughter abroad and 93,226,000 the domestic slaughter.

POUNDS OF DRESSED MEAT SUPPLY.

AVERAGE WEIGHTS PER ANIMAL.

The average weights of slaughtered animals at such places as Chicago, Kansas City, and South Omaha are determined with great accuracy and are based upon immense numbers, but the determination of the average weights of slaughtered animals for the United States is a complex proposition. The circular before mentioned procured a large amount of information not otherwise obtainable to add to the statistics of slaughter at great packing centers, and the entire amount of information procured was subjected to a process of harmonizing and of proper averaging, with results which will be found in Table 23 in the columns for live and for dressed weight per animal.

For all calves slaughtered in 1900 the average live weight of 235 pounds was determined and the dressed weight of 130 pounds; for all slaughtered cattle, except calves, the average live weight of 955

pounds and a dressed weight of 515 pounds; for lambs slaughtered, a live weight of 70 and a dressed weight of 37 pounds; for sheep, except lambs, a live weight of 100 and a dressed weight of 52 pounds; for swine, a live weight of 220 and a dressed weight, including lard, of 160 pounds.

TOTAL POUNDS FOR EACH CLASS OF ANIMALS.

It is a mere matter of computation now to arrive at the dressed weight of the slaughtered animals of 1900; this is numerically expressed in the last column of Table 23. The established figures of dressed weight are 758,030,000 pounds for calves; 6,683,670,000 pounds for cattle, except calves, including exports; these amounted to 830,855,000 pounds, so that the beef remaining for consumption amounted to 5,852,815,000 pounds, and this and the veal amount to 6,610,845,000 pounds of dressed weight of slaughtered cattle, including calves, remaining for domestic consumption. The total product of veal and beef, including exports, was 7,441,700,000 pounds of dressed meat.

The dressed meat from lambs slaughtered in 1900 amounted to 472,305,000 pounds and of sheep 612,716,000 pounds, or a total of 1,085,021,000 pounds of dressed weight of sheep, including lambs. The amount remaining for consumption after deducting the exports of 615,000 pounds is 1,084,406,000 pounds dressed weight.

The swine product of 1900 in terms of dressed weight was 8,023,200,000 pounds, of which the exports were 1,601,565,000 pounds, so that there remained for consumption 6,421,635,000 pounds of pork, including lard, in dressed weight.

The grand totals of dressed meat production in 1900 are 2,433,035,000 pounds for export, 14,116,886,000 pounds for domestic consumption, or a total production of 16,549,921,000 pounds.

TABLE 23.—*Number of slaughtered and exported meat animals and weight of dressed meat in the United States,[a] 1900.*

Class of animals.	Number in existence June 1, 1900.			Estimated number slaughtered, 1900.	Weight per head (pounds).		Pounds of slaughtered animals, dressed.
	On farms and ranges.	Not on farms and ranges.	Total.		Live.	Dressed.	
CATTLE.							
Calves under 1 year, supply and consumption	15,315,582	262,146	15,577,728	5,831,000	235	130	758,030,000
Steers:							
1 and under 2 years	6,953,113	55,543	7,008,656	1,687,000			
2 and under 3 years	5,193,006	51,005	5,244,011	2,336,000			
3 years and over	3,073,267	105,802	3,179,069	2,206,000			
Total steers	15,219,386	212,350	15,431,736	6,229,000			
Bulls 1 year and over	1,315,132	13,609	1,328,741	649,000			
Heifers 1 and under 2 years	7,174,483	79,517	7,254,000	1,687,000			
Cows 2 years and over:							
Dairy	17,135,633	973,033	18,108,666				
Other	11,559,194	75,767	11,634,961				
Total cows	28,694,827	1,048,800	29,743,627	4,413,000			
Total cattle, except calves, supply	52,403,828	1,354,276	53,758,104	12,978,000	955	515	6,683,670,000

[a] Excluding noncontiguous possessions. Population, 75,994,575.

TABLE 23.—*Number of slaughtered and exported meat animals and weight of dressed meat in the United States, 1900*—Continued.

Class of animals.	Number in existence June 1, 1900.			Estimated number slaughtered. 1900.	Weight per head (pounds).		Pounds of slaughtered animals, dressed.
	On farms and ranges.	Not on farms and ranges.	Total.		Live.	Dressed.	
CATTLE—continued.							
Average net exports, 1899–1901				240,000	1,250	700	[a] 830,855,000
Net total cattle, except calves, consumption							5,852,815,000
Net total cattle, consumption							6,610,845,000
Total supply, cattle, including exports	67,719,410	1,616,422	69,335,832	18,809,000			7,441,700,000
SHEEP.							
Lambs under 1 year, supply and consumption	21,650,746	51,701	21,702,447	12,765,000	70	37	472,305,000
Ewes 1 year and over	31,857,652	139,622	31,997,274				
Rams and wethers, 1 year and over	7,995,315	39,978	8,035,293				
Total sheep, except lambs	39,852,967	179,600	40,032,567	11,783,000	100	52	612,716,000
Average net exports, 1899–1901							615,000
Net total sheep, except lambs, consumption							612,101,000
Net total sheep, consumption							1,084,406,000
Total supply, sheep, including exports	61,503,713	231,301	61,735,014	24,548,000			1,085,021,000
SWINE.							
All ages, total supply	62,868,041	1,818,114	64,686,155	50,145,000	220	160	8,023,200,000
Average net exports, 1899–1900				36,000	220	160	[b] 1,601,565,000
Net total swine, consumption							6,421,635,000
TOTAL CATTLE, SHEEP, AND SWINE.							
Net total, consumption							14,116,886,000
Total supply, including exports	192,091,164	3,665,837	195,757,001	93,502,000			16,549,921,000

[a] Live animals (pounds of dressed weight) 168,000,000
Meat, etc. (pounds) 662,855,000
Total 830,855,000

[b] Live animals (pounds of dressed weight) 5,760,000
Meat, etc. (pounds) 1,595,805,000
Total 1,601,565,000

POUNDS OF EXTRA EDIBLE PARTS.

TEST WEIGHINGS BY PACKING-HOUSES.

The foregoing numbers standing for the dressed weight of meat do not include the large meat supply which is composed of various edible parts not included in the term "dressed," except that in the case of

pork lard has been included in dressed weight, although not so included in packing-house practice.

Estimates of meat supply and consumption in foreign countries usually make little or no mention of the extra edible parts that are not included in dressed weight. When they are not mentioned, the supposition is that they are not included in the statement of domestic meat supply. Some of the extra edible parts of cattle, and in a much less degree of sheep and swine, constitute a perceptible element of exports of meat and its products and may enter into statements of meat consumption in the case of a country depending upon imports for a portion of its supply.

The investigation which is the subject of this bulletin is fortunate in having had the cooperation of large packing-house proprietors in the determination of factors previously unknown, and one of the factors established by them is the weight of the extra edible parts of meat animals. In some cases test weighings were made by packing-houses especially to provide material for this bulletin, and in other cases records already made were supplied, averages being based upon the weights of many thousands of slaughtered animals.

PARTS AND WEIGHTS.

The edible parts of a calf not included in dressed weight are casings, sweetbread, edible tallow, liver, heart, lungs, brains, tongue, and head meat. By far the principal element in the total weight of the extra edible parts of a calf is the pluck, consisting of liver, heart, and lungs, which weighs on an average 6.891 pounds; the sweetbread weighs 0.402 of 1 pound, the tongue 0.851 of 1 pound, and the head meat 0.959 of 1 pound. All parts make a total of 9.6916 pounds per calf under 1 year.

Cattle have a large weight of extra edible parts, chiefly on account of the edible tallow, which averages 56.223 pounds per animal. Next in order of weight is tripe with 13.11 pounds, and then follow liver with 8.609 pounds, casings with 4.975 pounds, head meat with 4.513 pounds, tongue with 4.01 pounds, and the heart weighing 3.632 pounds. The ox lips weigh 1.05 pounds per animal, the tail 1.135 pounds, the brains 0.691 of 1 pound, and the sweetbread 0.145 of 1 pound. The total average weight of all parts for cattle, except calves under 1 year, is 98.093 pounds per animal.

The small quantity of 2.0557 pounds represents the average weight of the extra edible parts of sheep and lambs per animal, almost exactly one-half of which is edible tallow—1.027 pounds. The other edible parts, together making hardly more than 1 pound, are the edible casings, sweetbread, heart, brains, tongue, and head meat. In the weighings of these edible parts no separation was made of lambs from sheep, so that the average is for both classes.

The extra edible parts of swine not included in dressed weight are 12 in number, or one more than the number of these parts of cattle except calves. The total weight per hog is 25.055 pounds, to which the hocks and feet contribute 7.75 pounds, the head meat 7.5 pounds, the liver 3.25 pounds, the lungs 1.75 pounds, and the tongue 1 pound. The other parts are edible casings, sweetbread, heart, kidneys, brains, ears, and snout, each one of which weighs less than 1 pound.

TABLE 24.—*Weights of edible parts not included in dressed weight of meat animals.*

[For the purpose of this bulletin lard is included in dressed weight, although not so included in packing-house practice.]

Edible parts.	Calves under 1 year.	Cattle, except calves.	Lambs under 1 year.	Sheep, except lambs.	Swine.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Casings	0.0166	4.975	0.0312	0.0312	0.68
Tripe		13.110			
Sweetbread	.402	.145	.0005	.0005	0.375
Edible tallow	.216	56.223	1.027	1.027	
Liver	6.891	8.609			3.25
Heart		3.632	.277	.277	0.50
Lungs					1.75
Kidneys					0.50
Brains	.356	.691	.147	.147	0.50
Tongue	.851	4.010	.264	.264	1.90
Ears					0.50
Snout					0.75
Ox lips		1.050			
All other meat taken from head	.959	4.513	.309	.309	7.50
Hocks and feet					7.75
Ox tail		1.135			
Total	9.6916	98.093	2.0557	2.0557	25.055

TOTAL WEIGHT OF EXTRA EDIBLE PARTS.

The extreme utilization of extra edible parts is found in packing-house practice, but it prevails in a large degree, if not fully, in slaughter-house practice in most cities and large towns. To what extent these parts are utilized in country slaughter and farm slaughter, depends much upon local prejudice and custom. There are some regions in country places where these parts are nearly all eaten, and others where considerable fractions of them are not eaten. Therefore in adopting the total weight of the extra edible parts in the entire slaughter of the United States the computed quantity is somewhat greater than the quantity of these parts actually eaten. To what extent the computed total should be reduced on this account, it is impossible to determine, but the total quantity is accepted as entering into consumption with the understanding that the small fraction of this quantity not entering into consumption is offset by the meat that this investigation does not include, namely, the meat of goats, game, and horses.

The computed weight of the extra edible parts of animals slaughtered in the United States and exported in 1900 reaches the great total of 2,636,409,000 pounds. This total is almost entirely composed of the extra edible parts of cattle except calves, 1,273,051,000 pounds, and of swine, 1,256,383,000 pounds. The contribution by calves under 1 year is 56,512,000 pounds; of lambs under 1 year, 26,241,000 pounds; and of sheep except lambs, 24,222,000 pounds.

TOTAL MEAT SUPPLY.

SUM OF DRESSED MEAT AND EXTRA EDIBLE PARTS.

It is now a simple matter to establish the total meat supply or production of the United States and also the consumption. These are expressed in Table 25, wherein it appears that the sum of the dressed weight of meat consumed in this country, 14,116,886,000 pounds (Table 23), and of the extra edible parts, herein necessarily

treated as all consumed in this country, is 16,753,295,000 pounds. This number expresses the consumption of meat and its products in this country in terms of dressed weight and the weight of extra edible parts. The meat production or supply follows upon adding the net exports, whereupon it appears that the full production of 1900 was 19,186,330,000 pounds of dressed weight and weight of extra edible parts.

Upon referring to the last column of Table 25 it is evident that nearly one-half of the meat production is from swine, or 9,279,583,000 pounds, not far below which is beef, including veal, supplying 8,771,263,000 pounds; the mutton (including lamb) supply of 1900 weighed 1,135,484,000 pounds.

In consumption, however, beef, including veal, has a larger weight than pork, the total of the former being 7,940,408,000 pounds and of pork 7,678,018,000 pounds. In the production of meat, swine lead cattle, but in domestic consumption cattle lead swine; therefore, as has already appeared, pork and its products constitute much the larger fraction of the exports of meat and its products.

TABLE 25.—*Weight of edible parts of meat animals not included in dressed weight and of total meat supply.*

Class of animals.	Number slaughtered and exported.	Weight of extra parts per animal, in pounds.	Total weight, in pounds.		
			Extra edible parts.	Dressed and extra edible parts.	
				Not including exports.	Including exports.
Calves under 1 year	5,831,000	9.6916	56,512,000	814,542,000	814,542,000
Cattle, except calves	12,978,000	98.093	1,273,051,000	7,125,866,000	7,956,721,000
Total cattle	18,809,000	.....	1,329,563,000	7,940,408,000	8,771,263,000
Lambs under 1 year	12,765,000	2.0557	26,241,000	498,546,000	498,546,000
Sheep, except lambs	11,783,000	2.0557	24,222,000	636,323,000	636,938,000
Total sheep	24,548,000	.....	50,463,000	1,134,869,000	1,135,484,000
Swine	50,145,000	25.055	1,256,383,000	7,678,018,000	9,279,583,000
Total	93,502,000	.....	2,636,409,000	16,753,295,000	19,186,330,000

WEIGHT OF MEAT IN DIFFERENT LIMITATIONS.

SUMMARY OF THE ELEMENTS.

In treating meat consumption on subsequent pages the subtraction of the weight of bones and trimmings from that of dressed meat is made for the purpose of establishing the number of pounds of edible meat in dressed weight. The result of computations there made is here anticipated for the purpose of making a complete statement of the total weights of the different constituent parts of the meat supply in Table 26. The meat supply from the entire number of animals available for slaughter in 1900, 93,502,000, is included in the table. These animals had a live weight of 26,864,810,000 pounds, and the meat derived from them, embraced within the description "dressed," weighed 16,549,921,000 pounds.

Within this dressed weight were bones and nonedible trimmings which weighed 3,315,441,000 pounds, so that there remained for edible dressed weight 13,234,480,000 pounds. Outside of dressed weight these animals contributed in edible parts 2,636,409,000 pounds.

THREE ASPECTS OF THE SUPPLY.

The total meat supply may now be expressed in three forms:

(1) The supply of dressed meat, which is probably the nature of the meat supply to which the estimates for various foreign countries as well as for this country are limited. Total pounds, 16,549,921,000.

(2) Dressed weight and weight of extra edible parts. This is the weight that may best be adopted to express the complete meat supply. It includes dressed weight everywhere in use and other edible parts of animals, altogether making the entire nominally edible portions of the slaughtered animal with weights based upon trade practice. Total pounds, 19,186,330,000.

(3) Weight of the edible portion of dressed weight and weight of extra edible parts. This is the weight with which students of nutrition and dietetics are most concerned. It is the net meat weight—that is, the weight of strictly edible meat. Total, 15,870,889,000 pounds.

SWINE AND CATTLE COMPARED.

Nearly the entire meat supply comes from cattle, including calves under 1 year, and swine, and the total weights of these two classes may well be compared throughout Table 26. The live weight of cattle, including calves, is 13,761,060,000 pounds; of swine, 11,031,900,000 pounds. The swine live weight is exceeded by the cattle live weight.

The positions of swine and cattle are reversed in the matter of dressed weight, since the total dressed weight of the swine is 8,023,200,000 pounds and of cattle, including calves, 7,441,700,000 pounds. Subtractions to be made from dressed weight on account of bones and trimmings are greater in the case of cattle, including calves, than in that of swine, the total for cattle being 1,835,280,000 pounds and for swine 1,203,480,000 pounds.

The result of these subtractions is that the total production of edible dressed meat from swine still more exceeds the total for cattle, including calves, the weight of the edible dressed meat of the cattle being 5,606,420,000 and of swine 6,819,720,000 pounds.

With regard to the extra edible parts, the totals for cattle, including calves, and swine are nearly the same, or 1,329,563,000 pounds for cattle, including calves, and 1,256,383,000 pounds for swine.

The entire meat supply as expressed in terms of dressed weight and weight of extra edible parts receives half a billion pounds more from swine than from cattle, including calves. The cattle contribution is 8,771,263,000 pounds and the swine contribution 9,279,583,000 pounds. The contribution from sheep and lambs is 1,135,484,000 pounds.

The superiority of swine over cattle as meat producers is still more

apparent when the meat weight is expressed in terms of net pounds of food. In terms of dressed weight and weight of extra edible parts, the total for cattle, including calves, is 508,320,000 pounds under the total for swine. But upon reduction of dressed weight to food terms, the total for cattle, including calves, is 1,140,120,000 pounds under the total for swine.

AVERAGE MEAT ANIMAL.

The average animal in the meat supply of 1900 is readily computed in Table 26. The averages as so computed have no reality, but for comparison one with another may be of some use. The live weight of the average meat animal of the supply of 1900 is 287 pounds; the dressed weight, 177 pounds; the weight of the bones and trimmings in dressed weight, 35 pounds; the edible portion of the dressed weight, 142 pounds; the weight of extra edible parts, 28 pounds; the dressed weight and the weight of extra edible parts, 205 pounds; and the edible portion of the dressed weight and the weight of the extra edible parts, 170 pounds.

TABLE 26.—*Total weights of the constituent parts of the meat supply, 1900.*

Class of animals.	Slaughtered and exported.	Total weight.		
		Live.	Dressed.	Bones and trimmings in dressed weight.
	Number.	*Pounds.*	*Pounds.*	*Pounds.*
Calves under 1 year	5,831,000	1,370,285,000	758,030,000	231,199,000
Cattle, except calves	12,978,000	12,390,775,000	6,683,670,000	1,604,081,000
Lambs under 1 year	12,765,000	893,550,000	472,305,000	120,438,000
Sheep, except lambs	11,783,000	1,178,300,000	612,716,000	156,243,000
Swine	50,145,000	11,031,900,000	8,023,200,000	1,203,480,000
Total	93,502,000	26,864,810,000	16,549,921,000	3,315,441,000
Average per animal		287	177	35

Class of animals.	Total weight.			
	Edible dressed.	Extra edible parts.	Dressed and extra edible parts.	Edible dressed and extra edible parts.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
Calves under 1 year	526,831,000	56,512,000	814,542,000	583,343,000
Cattle, except calves	5,079,589,000	1,273,051,000	7,956,721,000	6,352,640,000
Lambs under 1 year	351,867,000	26,241,000	498,546,000	378,108,000
Sheep, except lambs	456,473,000	24,222,000	636,938,000	480,695,000
Swine	6,819,720,000	1,256,383,000	9,279,583,000	8,076,103,000
Total	13,234,480,000	2,636,409,000	19,186,330,000	15,870,889,000
Average per animal	142	28	205	170

SUBDIVISIONS OF LIVE WEIGHT OF MEAT ANIMALS.

EXPRESSED IN DIAGRAM.

The different descriptions of weights into which meat animals are subdivided in this bulletin have repeatedly been before the reader, but in order that the subdivisions of the live weight may be compre-

hensively viewed at a glance the following formal statement is offered:

1. Live weight.
2. "Meat" weight.
   - 4. Dressed weight. (Pork includes lard.)
     - 6. Weight of bones and retail butchers' trimmings.
     - 7. Edible dressed weight.
   - 5. Weight of extra edible parts not included in dressed weight.
3. Nonmeat weight: Offal, horns, hide, etc.

HORSE MEAT.

SMALL SLAUGHTER, CONSUMPTION, AND EXPORT.

During the fiscal years 1901–1903 there was some slaughter of horses for the export of their dressed meat, and the records of the Bureau of Animal Industry for 1901 show that 1,988 horses passed inspection for slaughter, 1,624 passed inspection in 1902, and 333 in 1903. There was no inspection previous to 1901 nor subsequent to 1903, and during the three years 3,945 horses passed inspection.

The inspection of the horse meat exported under Federal certificates covered 249,900 pounds in 1901, 170,968 pounds in 1902, and 28,000 pounds in 1903, or a total of 448,868 pounds during the three years.

There is no definite information with regard to the slaughter of horses for meat in this country beyond the foregoing figures, and no attempt can be ventured to estimate their number and the quantity of the meat. Whatever the amount was in 1900, or is now, it is very small and does not enter into interstate, or foreign, trade and can not enter these trades without inspection by the Bureau of Animal Industry of this Department.

LARD AND TALLOW.

ESTIMATED PER CAPITA CONSUMPTION.

Figures which may be regarded as maximum statements of the production and consumption of lard and beef tallow are presented in Table 27. Packing-house records for many years establish a lard product for slaughtered hogs which varies from year to year within narrow limits, and an average of 33 pounds is adopted for 1900. Without having any definite information with regard to the lard derived from hogs in country and farm slaughter, the only average production that can be given to such slaughtered hogs is the packing-house average. With this factor multiplied into the number of slaughtered swine, the lard production of 1900 was 1,653,597,000 pounds, of which 636,586,000 pounds stand for the approximate exports, leaving for consumption 1,017,011,000 pounds. The per capita consumption consequently averages 13.38 pounds, and the average consumption per private family of 4.6 persons is 62 pounds.

The amount of edible tallow per slaughtered bovine animal, not including calves under 1 year, as reported by packing-houses for the use of this investigation, is 56.223 pounds, and when this average is applied to the total number of slaughtered cattle the estimated beef tallow production amounts to 716,168,000 pounds for 1900. The exports approximately were 83,099,000 pounds and the consumption about 633,069,000 pounds, or a per capita average of 8.33 pounds, and an average of 38 pounds per private family of 4.6 persons.

TABLE 27.—*Computed lard and tallow production and consumption, 1900.*

Item.	Lard.	Item.	Beef tallow.
Number of swine slaughtered	50,109,000	Number of cattle slaughtered	12,738,000
Total pounds of lard at 33 pounds per animal	1,653,597,000	Total pounds of tallow at 56.223 pounds per animal	716,168,000
Average pounds of lard exported yearly, 1900-1901	636,586,000	Average pounds of tallow exported yearly, 1900-1901	83,099,000
Total pounds of lard in domestic consumption	1,017,011,000	Total pounds of tallow in domestic consumption	633,069,000
Pounds of lard consumed per capita	13.38	Pounds of tallow consumed per capita	8.33
Pounds of lard consumed per private family of 4.6 persons	62	Pounds of tallow consumed per private family of 4.6 persons	38

COMMERCIAL SAUSAGE OUTPUT.

RECKONED TO BE NEARLY 1,000,000,000 POUNDS.

From the National Provisioner of October 1, 1904, the following information is derived: There are about 20,000 small sausage makers in the United States, exclusive of farmers who make links for the trade from home-killed meats. Within the New York metropolitan area the sausage makers number nearly 1,000 and their yearly output of sausage is estimated to equal 60,000,000 pounds.

One dressed-beef company in New York sells as much as 30,000,000 pounds of bologna meat a year, and other slaughterhouses in that city put upon the market a large amount of sausage meats.

The quantity of commercial sausages in the United States is computed upon a meat production less than that established by this investigation, but upon the basis adopted by the National Provisioner 927,500,000 pounds of green sausages are made annually, and in their making 375,000,000 pounds of meat are used and 552,500,000 pounds of water and potato flour or other filling.

LIVE WEIGHT.

CATTLE OCCUPY LEADING PLACE.

The live weight of the various census classes of meat animals having been established by means of the circular of inquiry used in this investigation, supplemented by published information, it becomes a matter of quick computation to arrive at the live weight of the cattle, sheep, and swine constituting the available slaughter of 1900. The results are exhibited in Table 28. It appears therein that the live weight of calves available for slaughter in 1900 was 1,370,285,000 pounds; of the steers, 6,248,450,000 pounds; of the cows, 4,192,350,000

pounds; and of all cattle, except calves, 12,390,775,000 pounds. The live weight of the exported cattle was about 300,000,000 pounds. The live weight of all cattle available for slaughter, including calves and exports, was 13,761,060,000 pounds.

The live weight of lambs available for slaughter was 893,550,000 pounds; of sheep, except lambs, 1,178,300,000 pounds; or a total for sheep and lambs, from which there is no deduction to be made for live exports, amounting to 2,071,850,000 pounds.

The live weight of the swine available for slaughter was 11,031,900,000 pounds, and the approximate weight of the live exports was 7,920,000 pounds.

The entire supply of cattle, sheep, and swine for slaughter and export in 1900 had a live weight of about 26,864,810,000 pounds, of which only 307,920,000 pounds represent the live exports.

TABLE 28.—*Live weight of slaughtered meat animals, 1900.*

Class of animals.	Number slaughtered and exported.	Live weight in pounds.	
		Per head.	Total.
CATTLE.			
Calves under 1 year	5,831,000	235	1,370,285,000
Steers:			
1 and under 2 years	1,687,000	750	1,265,250,000
2 and under 3 years	2,336,000	1,000	2,336,000,000
3 years and over	2,206,000	1,200	2,647,200,000
Total, steers	6,229,000	1,003	6,248,450,000
Bulls 1 year and over	649,000	1,250	811,250,000
Heifers, 1 and under 2 years	1,687,000	675	1,138,725,000
Cows 2 years and over:			
Dairy	.....	.....	.....
Other	.....	.....	.....
Total cows	4,413,000	950	4,192,350,000
Total cattle, except calves	12,978,000	955	12,390,775,000
Average net exports, 1899–1901	240,000	1,250	300,000,000
Net total cattle, except calves, domestic slaughter	12,738,000	949	12,090,775,000
Net total cattle, domestic slaughter	18,569,000	.....	13,461,060,000
SHEEP.			
Lambs under 1 year	12,765,000	70	893,550,000
Ewes 1 year and over	.....	.....	.....
Rams and wethers 1 year and over	.....	.....	.....
Total sheep, except lambs	11,783,000	100	1,178,300,000
Average net exports, 1899–1901	.....	.....	.....
Net total sheep, except lambs, domestic slaughter	11,783,000	100	1,178,300,000
Net total sheep, domestic slaughter	24,548,000	.....	2,071,850,000
SWINE.			
All ages	50,145,000	220	11,031,900,000
Average net exports, 1899–1901	36,000	220	7,920,000
Net total swine, domestic slaughter	50,109,000	220	11,023,980,000
TOTAL CATTLE, SHEEP, AND SWINE.			
Domestic slaughter	93,226,000	.....	26,556,890,000
Domestic slaughter and live exports	93,502,000	.....	26,864,810,000

RATIO BETWEEN SLAUGHTER AND STOCK.

SUPERIORITY OF SWINE.

Much interest is felt in the degree of the meat productivity of the different kinds of meat animals, both in this country and in Europe. Definite answers with regard to this have been established by this investigation with percentages that may be found in Table 29. The census meat animals being the stock from which the available slaughter is derived, the cattle slaughtered and the live exports, together constituting the available slaughter, have percentage relationships to the stock of meat animals which are readily computed.

The available slaughter of calves under 1 year in 1900 is 37.4 per cent of the census number of calves June 1; of steers, 40.4 per cent; of cows, 14.8 per cent; of all cattle, except calves, 24.1 per cent; and of all cattle, including calves, 26.8 per cent. The percentage for lambs under 1 year is 58.8 per cent; for sheep, except lambs, 29.4 per cent; and for all sheep, including lambs, 39.8 per cent.

In various results it is appearing in this investigation that the hog is a superior economic farm meat animal, and new evidence of this fact appears in the large ratio of the available slaughter of swine to the entire stock, which is found to be 77.5 per cent. Brought closely together for comparison at a glance, the productivity of cattle, sheep, and swine for slaughter are, respectively, 26.8, 39.8, and 77.5 per cent.

TABLE 29.—*Percentage of existing animals slaughtered and exported, 1900.*

Class of animals.	Per-centage.
CATTLE.	
Calves under 1 year	37.4
Steers:	
1 and under 2 years	24.1
2 and under 3 years	44.5
3 years and over	69.4
Total steers	40.4
Bulls, 1 year and over	48.8
Heifers, 1 and under 2 years	23.3
Cows, 2 years and over	14.8
Total cattle, except calves	24.1
Total cattle	26.8
SHEEP.	
Lambs under 1 year	58.8
Sheep, except lambs	29.4
Total sheep	39.8
SWINE.	
All ages	77.5
CATTLE, SHEEP, AND SWINE.	
All ages	47.8

FARM VALUE OF THE SLAUGHTER.

NEARLY THREE-QUARTERS OF A BILLION DOLLARS IN 1907.

It is by no means a satisfactory estimate to compute the farm value of the slaughtered animals. The number of these animals has been established, but there is no information concerning their value at the farm, except the total value reported by the census for each class of animals. Hence it is possible to compute the average value per head within each class and to apply this average to the number of animals in the available slaughter. This has been done in Table 30.

The computed farm value of the available slaughter of calves in 1900 is $52,000,000; of steers, $178,000,000; of cows, $120,000,000; of all cattle, except calves, $349,000,000; and of all cattle, including calves and exports, $402,000,000.

The computation for lambs estimates a farm value of $25,000,000 for the slaughter of 1900, and of $38,000,000 for the sheep, or a total of $63,000,000.

Computed in like manner, the farm value of the available swine slaughter was $185,000,000.

For the grand total of the available slaughter of cattle, sheep, and swine there was a farm value of $649,000,000 in 1900; if the higher values of 1907 were to be applied to the available slaughter of 1900, the inference is that the available slaughter of 1907 will be worth at the farm at least $730,000,000.

TABLE 30.—*Farm value of slaughtered and exported animals, 1900.*

Class of animals.	Number slaughtered and exported.	Census value.	Average.
CATTLE.			
Calves under 1 year	5,831,000	$52,245,760	$8.96
Steers:			
1 and under 2 years	1,687,000	31,631,250	18.75
2 and under 3 years	2,336,000	68,094,400	29.15
3 years and over	2,206,000	78,489,480	35.58
Total steers	6,229,000	178,215,130	28.61
Bulls, 1 year and over	649,000	22,384,010	34.49
Heifers, 1 and under 2 years	1,687,000	28,577,780	16.94
Cows, 2 years and over	4,413,000	120,254,250	27.25
Total cattle, except calves	12,978,000	349,431,170	26.92
Average net exports, 1899–1901	240,000	6,460,800	26.92
Net total cattle, except calves, domestic slaughter	12,738,000	342,970,370	26.92
Net total cattle, domestic slaughter	18,569,000	395,216,130	.....
Total cattle, including calves and exports	18,809,000	401,676,930	.....
SHEEP.			
Lambs under 1 year	12,765,000	24,764,100	1.94
Ewes, 1 year and over	.....	.....	.....
Rams and wethers, 1 year and over	.....	.....	.....
Total sheep, except lambs	11,783,000	37,941,260	3.22
Average net exports, 1899–1901	.....	.....	.....
Net total sheep, except lambs	.....	.....	.....
Net total sheep, domestic slaughter	24,548,000	62,705,360	.....

TABLE 30.—*Farm value of slaughtered and exported animals, 1900*—Continued.

Class of animals.	Number slaughtered and exported.	Census value.	Average.
SWINE.			
All ages	50,145,000	$185,035,050	$3.69
Average net exports, 1899–1901	36,000	132,840	3.69
Net total swine	50,109,000	184,902,210	3.69
TOTAL CATTLE, SHEEP, AND SWINE.			
Total, except live exports, domestic slaughter	93,226,000	642,823,700	.....
Total, including live exports	93,502,000	649,417,340	.....

LIVE AND DRESSED WEIGHT.

COMPARATIVE MEAT FRACTIONS.

One of the most important problems of meat production is the obtaining of a larger percentage of meat product, or, better yet, of edible product, from the live weight of slaughtered animals. Indeed, the essence of the business of meat production is contained in this problem, although there are supplementary elements in matters of feeding, of assimilation, and converting food into meat weight.

Information contained in foregoing tables in this bulletin permits the construction of the first part of Table 31, wherein will be found numerical relationships between live and dressed weight, and also between live weight and the total of dressed weight and the weight of extra edible parts, for each of five classes of meat animals.

For calves under 1 year, the dressed weight is 55 per cent of the live weight; for cattle, except calves, 54 per cent; for lambs under 1 year, 53 per cent; for sheep, except lambs, 52 per cent; and for swine, 73 per cent. The uniformity of these percentages, except the percentage for swine, is conspicuous, and the high percentage representing swine is prominent.

Fully to express the meat ratio to live weight, the weight of extra edible parts has been added to dressed weight and the sum converted into a percentage of live weight. This results in raising the dressed meat percentage of cattle, except calves, from 54 to 75 per cent; but the percentages for calves under 1 year, for lambs under 1 year, and for sheep are but little increased. The percentage for swine, however, is increased from 73 to 84 per cent of the live weight, or considerably above the percentage for cattle, except calves, and enormously above the percentages for calves under 1 year, lambs under 1 year, and sheep, except lambs.

HIGH POSITION OF POULTRY.

Although poultry is not an element in what is regarded as "meat" production, information has come to hand with regard to the ratios between live and dressed weight of poultry which may not unfittingly be included in Table 31.[a] Careful weighings were made of a large number of cocks, cockerels, hens, and pullets in three conditions, namely, (1) live; (2) dressed, but only bled and plucked; and (3) bled and plucked, and intestines, head, and feet removed. The

[a] Derived from Bulletin No. 38 of the Storrs Agricultural Experiment Station, p. 28.

percentages computed for poultry in Table 31 are based upon the total number of pounds of all fowls embraced in the test weighings and not upon the average weights per fowl given in the table.

The fowls of the four classes mentioned, dressed to the extent of bleeding and plucking, weighed on the average from 89 to 92.3 per cent of the live weight; fully dressed and drawn and with head and feet removed, the remaining weight ranges from 74 to 76.5 per cent of the live weight.

The weights recorded in the experiment permit computations of percentages based upon dressed weight after bleeding and plucking, for the weight remaining after removal of the intestines, head, and feet, for each of the four classes of cocks, cockerels, hens, and pullets. The percentages are found to range from 80.7 to 83.2 per cent.

HIGHEST PLACE FOR SWINE.

Comparison may now be made between meat animals and poultry with respect to the percentage of live weight that becomes meat. The columns of Table 31 that are comparable for this purpose are the last column for meat animals and the next to the last column for poultry. These represent the edible fraction of the live animal, including bones. The inferiority of calves under 1 year, lambs under 1 year, and sheep, except lambs, is large; the equality between poultry and cattle, except calves, is apparent; and the economic superiority of swine over even poultry, as far as these percentages signify, is a conspicuous fact.

TABLE 31.—*Relation between live and dressed weight of meat animals, and of poultry.*

Class of animals.	Weight per head in pounds, including exports.			Percentage of live weight (approximate).	
	Live.	Dressed.	Dressed and extra edible parts.	Dressed.	Dressed and extra edible parts.
Calves under 1 year	235	130	139.6916	55	59
Cattle, except calves	955	515	713.093	54	75
Lambs under 1 year	70	37	39.0557	53	56
Sheep, except lambs	100	52	54.0557	52	54
Swine	220	160	185.055	73	84

POULTRY.

Class.	Average live weight in pounds.	Dressed weight in pounds.		Percentage of live weight.		Percentage of dressed, bled, and plucked, left after removal of intestines, head, and feet.
		Bled and plucked.	Bled and plucked, and intestines, head, and feet removed.	Bled and plucked.	Bled and plucked, and intestines, head, and feet removed.	
Cocks	7.1	6.6	5.4	92.2	76.5	83.0
Cockerels	6.4	5.7	4.7	89.0	74.0	83.2
Hens	5.9	5.5	4.5	92.3	75.8	82.1
Pullets	5.6	5.1	4.1	91.9	74.2	80.7
Barred Plymouth Rocks	6.4	5.8	4.9	90.9	75.9	83.5
White Plymouth Rocks	6.9	6.2	5.2	90.7	75.0	82.7
White Wyandottes	6.0	5.4	4.5	90.3	74.5	82.5
Buff Wyandottes	6.6	5.9	4.8	89.3	72.3	81.0
Rhode Island Reds	6.1	5.4	4.5	89.3	73.1	81.8
Black Langshans	6.3	5.7	4.7	91.1	75.5	82.9
S. C. White Leghorns	4.0	3.5	2.8	88.3	70.3	79.6
R. C. Brown Leghorns	3.7	3.3	2.6	89.5	69.8	77.9
White Wyandotte Light Brahma cross.	7.0	6.3	5.1	89.4	72.4	81.0

TOTAL FOR LARGE SLAUGHTERHOUSES.

GAINING UPON THE SMALL ONES.

The slaughter of meat animals has been drifting more and more to the large establishments in slaughtering centers, and in order that the magnitude, fluctuations, and increase of the slaughtering in principal places may be observed for a long series of years Table 32 has been prepared.

FRACTION OF THE NATIONAL SLAUGHTER.

Comparison may be made between the slaughterings expressed in Table 32 and the total cattle slaughtered as determined by this investigation. This is tersely expressed in Table 33. The average slaughter of cattle, except calves, at principal places for 1898–1902 was 41.05 per cent of the cattle (except calves) slaughter of the United States; the ratio for sheep, including lambs, is 33.85 per cent; and for swine 56.91 per cent. The ratio for all animals included in Table 33 is 48.12 per cent.

Calves are not included in Table 33, and with this exception nearly one-half of the slaughter of this country in 1900 was done in the large slaughterhouses at slaughtering centers.

TABLE 32.—*Number of cattle, sheep, and swine slaughtered at principal places.*

[Cincinnati Price Current's Statistical Annual for 1907.]

CATTLE, SHEEP, AND LAMBS.

Calendar year.	Cattle, except calves.			Sheep and lambs.		
	Total.	Slaughtered (Chicago, Kansas City, St. Louis, and Omaha).	Receipts (Boston, New York, Philadelphia, and Baltimore).	Total.	Slaughtered (Chicago, Kansas City, St. Louis, and Omaha).	Receipts (Boston, New York, Philadelphia, and Baltimore).
1884	2,267,529	1,256,000	1,011,529	4,348,697	778,000	3,570,697
1885	2,409,956	1,449,000	960,956	4,272,409	988,000	3,284,409
1886	2,514,168	1,615,000	899,168	4,304,064	979,000	3,325,064
1887	2,853,095	2,048,000	805,095	4,605,327	1,173,000	3,432,327
1888	3,404,976	2,362,000	1,042,976	4,727,809	1,275,000	3,452,809
1889	3,901,921	2,688,000	1,213,921	4,781,647	1,476,000	3,305,647
1890	4,653,139	3,373,000	1,280,139	4,896,327	1,622,000	3,274,327
1891	4,545,597	3,356,000	1,189,597	5,253,965	1,879,000	3,374,965
1892	5,102,620	3,911,000	1,191,620	5,505,582	2,112,000	3,393,582
1893	5,042,689	4,104,000	938,689	6,607,642	3,278,000	3,329,642
1894	5,038,126	3,959,000	1,079,126	7,643,883	3,565,000	4,078,883
1895	4,609,337	3,590,000	1,019,337	8,259,586	3,995,000	4,264,586
1896	4,709,453	3,627,000	1,082,453	7,910,361	4,299,000	3,611,361
1897	4,774,495	3,711,000	1,063,495	7,795,623	4,654,000	3,141,623
1898	4,592,913	3,553,000	1,039,913	7,635,128	4,647,000	2,988,128
1899	5,211,922	3,786,000	1,425,922	7,964,686	5,019,000	2,945,686
1900	5,152,269	4,053,000	1,099,269	7,890,878	4,798,000	3,092,878
1901	5,576,310	4,491,000	1,085,310	8,775,980	5,276,000	3,499,980
1902	5,613,396	4,619,000	994,396	9,274,758	5,832,000	3,442,758
1903	5,784,996	4,833,000	951,996	9,141,356	5,827,000	3,314,356
1904	5,597,105	4,553,000	1,044,105	8,593,102	5,465,000	3,128,102
1905	5,956,171	4,826,000	1,130,171	8,305,698	5,879,000	2,425,698
1906	6,126,903	4,993,000	1,133,903	8,723,175	6,117,000	2,606,175

TABLE 32.—*Number of cattle, sheep, and swine slaughtered at principal places*—Continued.

SWINE.

Year beginning March 1—	Total.	Western packed.	Eastern packed and receipts.	Year beginning March 1—	Total.	Western packed.	Eastern packed and receipts.
1872		5,915,814		1890	23,966,134	17,713,134	6,253,000
1873		6,529,116		1891	20,913,614	14,457,614	6,456,000
1874		6,766,670		1892	18,196,630	12,390,630	5,806,000
1875		6,142,478		1893	16,789,006	11,605,006	5,184,000
1876		7,409,174		1894	21,619,645	16,003,645	5,616,000
1877		9,048,566		1895	20,480,635	15,010,635	5,470,000
1878		10,858,792		1896	22,669,978	16,928,978	5,741,000
1879		11,001,699		1897	26,134,260	20,201,260	5,933,000
1880		12,243,354		1898	29,793,695	23,651,695	6,142,000
1881		10,551,449		1899	28,171,726	22,200,821	5,970,905
1882		9,342,999		1900	28,980,048	23,600,674	5,379,374
1883		9,183,100		1901	30,396,452	25,411,676	4,984,776
1884		10,519,108		1902	25,246,810	20,605,571	4,641,239
1885		11,263,567		1903	27,617,585	22,375,686	5,241,899
1886		12,033,012		1904	29,691,739	23,918,423	5,773,316
1887		11,532,707		1905	31,272,621	25,574,760	5,697,861
1888		10,798,974		1906	30,978,748	25,430,555	5,548,193
1889	18,906,303	13,545,303	5,361,000				

TABLE 33.—*Percentage of total slaughter done in large slaughterhouses, 1900.*

[Slaughterhouse statistics derived from Cincinnati Price Current.]

Class of animals.	Total number slaughtered, 1900.	Slaughtered in large slaughterhouses, average for 1898–1902.	
		Number.	Percentage of total slaughter.
Cattle, except calves	12,738,000	5,229,362	41.05
Sheep, including lambs	24,548,000	8,308,286	33.85
Swine	50,109,000	28,517,746	56.91
Total	87,395,000	42,055,394	48.12

MEAT CONSUMPTION.

PER CAPITA AND PER FAMILY.

RATIOS FOR NUMBER OF ANIMALS.

For convenience and a saving of space, figures expressing meat consumption have appeared in many places in the foregoing treatment of production. Some features of consumption remain for treatment, as well as a brief grouping of some statements that have preceded.

After deducting the number of exported animals, live and computed from the animals constituting the meat supply of 1900, the number of animals consumed in the United States in 1900 is found to be 83,511,000. Almost half of these, or 41,486,000, are swine. The sheep, including lambs, are next in order below, with the number of 24,537,000, the lambs exceeding the sheep by almost a million.

The cattle, including calves, number 17,488,000, in which number the calves are 5,831,000, and the cattle, except calves, 11,657,000. (See Table 9.)

The foregoing numbers readily permit the computation of per capita averages of consumption of the various classes of meat animals and the per capita averages are convertible into averages per private family, which was established by the census of 1900 as containing 4.6 persons. This average number of persons per private family has been divided into the entire population in order that the total population may be accounted for in terms of private families.

The consumption of 1.099 of a meat animal per capita is established in Table 12. The fraction of a hog consumed per capita in 1900 is 0.546; of a calf under 1 year, 0.077; of a bovine animal over 1 year of age, 0.153; of a lamb under 1 year, 0.168; and of a sheep over 1 year, 0.155.

DECLINING RATIO FOR MEAT INDICATED.

Upon reference to Table 17 it will be remembered that the per capita consumption stock of composite meat animals has steadily and very considerably declined since 1840, with a temporary tendency to increase in 1890, followed by a decided decrease. The composite meat animal per capita, computed with the consumption stock as explained in connection with Table 17, declined two-fifths from 1840 to 1900. In other words, if the per capita composite meat animal of 1840 is represented by 100, the index number for 1900 is 59.3. Upon taking 1860 as a base line at 100, the index number for 1880 is 87.8; for 1890 it is 96.3; and for 1900 it is 72.

If 1890 is taken as a base number, the index number for 1900 is 74.8, indicating a loss of one-fourth of a composite meat animal per capita in the consumption stock during the ten years.

The foregoing indications of a loss of consumption stock of meat animals as compared with population is confirmed in detail in Table 18, wherein per capita ratios of all cattle, sheep, and swine to population may be found. In the case of each class of animals the decline is distinct and unequivocal.

ANALYSIS OF THE DECLINE.

The diminishing per capita consumption of meat indicated in Tables 17 and 18 is accentuated by an export that has increased during the fifty-seven years covered by the tables from a very small fraction of the meat supply to one-eighth of it. These two forces operating at the same time, and toward the same result, would seem to make it doubly certain that the per capita consumption of meat has been diminishing.

On the other hand, it is likely that the meat supply per head of meat animals in stock has increased, particularly since 1870, 1880, and 1890. The practice of slaughtering cattle at younger ages, which began less than a score of years ago and which has continuously reduced the average age of cattle slaughtered to the present time, has a certain arithmetical result upon the fraction of meat production by any given number of cattle in stock. If at the present time 100 cattle in stock produce on the average 24.1 per cent of their number annually for slaughter, calves under 1 year not included, computations of the fraction of slaughter under supposed former conditions at the older average age of years ago indicate that the fraction of slaughter for cattle, not including calves under 1 year, was perhaps 20 or 21 per cent.

The fraction of calves dropped that go to slaughter has undoubtedly increased, partly because of the increase of dairying and partly because of the increased demand for veal in cities. The fraction of the lamb slaughter has also undoubtedly increased, beginning a few years preceding 1900, on account of the growing taste for lamb meat. With regard to hogs, however, there has been no perceptible increase in the fraction of slaughter on account of slaughtering at younger ages.

The fraction of the slaughter in 1900, all classes of animals included, was 47.8 per cent of the stock of these animals on hand June 1, and it is apparent from the foregoing analysis of the different classes and ages of animals which together contribute this percentage of slaughter that the fraction for the entire number was not so very much less a score of years ago. It is to be remembered that swine constitute more than half the slaughter and almost half the meat production and exercise no perceptible effect upon the fraction of slaughter on account of slaughtering at younger ages.

While the fraction of slaughter has, all things considered, somewhat increased, the utilization of the carcasses of all meat animals for meat purposes has been extended, so that the extra edible parts not included in dressed weight probably produce more meat per slaughtered animal than they did a score of years before, the whole country being under view.

Notwithstanding gains in meat production due to increased slaughter of calves and lambs, to slaughter of steers and heifers and, in a much less degree, other cattle, at younger ages, the marked decrease in the per capita consumption stock of meat animals, accompanied by an increasing fraction of exports, both measured arithmetically as shown in Tables 17 and 11, would seem to indicate beyond the slightest doubt that the per capita consumption of meat in this country has been diminishing, and particularly so since 1890 and 1880.

CONSUMPTION OF DRESSED WEIGHT.

TOTAL EXPORTS SUBTRACTED.

The quantity of the exports of meat is partly stated in the annual statistics of exports, and from the annual reports an average representing 1900 has been established, and this has been added to the average net export of meat computed upon the net export of live animals. The two numbers constitute the quantity of exported meat adopted in this bulletin as being the quantity that can be definitely established. There is some meat that goes out of the country which is not reported in quantity, and no attempt has been made to convert its value into pounds, but the quantity of such meat is comparatively small.

As exhibited in Table 23, the quantity of beef exported in 1900 was 830,855,000 pounds. No considerable veal was exported, and net veal exports are not mentioned. Probably no lamb was exported; certainly none is identifiable. The exported mutton weighed 615,000 pounds. Two-thirds of the meat exports are of pork, including lard, the quantity in 1900 being 1,601,565,000 pounds. The total of the exports of the three classes of meat is 2,433,035,000 pounds. Some

of this exported meat is composed of the edible parts of meat animals that are not included in dressed weight, but nothing definite with regard to this can be determined. So it has been necessary to subtract the total of these exports from the dressed weight of the meat supply in the procedure of arriving at the quantity remaining for consumption, thus computing a consumption below the fact.

VARIOUS AVERAGES COMPUTED.

The dressed weights of meat remaining for consumption expressed in pounds may be found in Table 23, last column, and these numbers have been related to population in Table 34. In terms of dressed weight the per capita consumption of veal in this country in 1900 was 10 pounds; of beef, except veal, 77 pounds; total beef, including veal, 87 pounds.

The total dressed weight of lamb consumed indicates a per capita consumption of 6.2 pounds; of mutton, except lamb, 8.1 pounds; total mutton, including lamb, 14.3 pounds. The per capita consumption of pork, including lard, in terms of dressed weight, is 84.5 pounds, or somewhat above beef consumption, excluding veal, and a little below the consumption of beef, including veal.

More understandable ratios may be obtained by computing them upon the number of private families in the population corresponding to the census average of 4.6 persons. The per family consumption of veal, in terms of dressed weight, is 46 pounds; of beef, except veal, 354 pounds; and of beef, including veal, 400 pounds. The average for lamb is 29 pounds; for mutton, except lamb, 37 pounds; and for mutton, including lamb, 66 pounds. A result of 389 pounds follows the computation for pork, including lard.

Still bearing in mind that these figures stand for dressed weight of meat, the grand total dressed meat consumption per private family of 4.6 persons in the United States in 1900 was 855 pounds; but the caution that the weight of extra edible parts is to be added should not be forgotten, nor that the subtraction should be made for bones and trimmings to express this quantity in terms of net food.

EDIBLE DRESSED WEIGHT.

BONES AND RETAILER'S TRIMMINGS EXCLUDED.

One of the efforts of this investigation was to establish the weight of bones, trimmings, and other nonedible portions of dressed meat, so that the quantity of edible meat contained in dressed weight might be ascertained. There were no published figures with regard to this that had a sufficiently broad basis or that could sensibly be applied to the slaughter of the whole country, so the cooperation of several large packing-houses was very kindly given, and in them extensive test weighings were made of the various nonedible parts embraced in dressed weight. The informed reader knows that these weights differ among the different classes of market animals of cattle, and so with sheep and swine, and it is certain that the weights here adopted do not conform to the experience of every packing-house. It is believed, however, that these weights so nearly represent the entire slaughter of the whole country that they may be applied with a fair degree of satisfaction.

The subtraction to be made from the dressed weight of veal on account of bones and other uneaten parts is 30.5 per cent; of beef, 24 per cent; of lamb and mutton, 25.5 per cent; of pork, including lard, 15 per cent. Almost exactly one-fourth of the weight is to be taken off in the case of beef, including veal, and the same fraction in the case of mutton, including lamb, on account of the bones and trimmings; a little more than one-seventh from the dressed weight of pork, including lard; and slightly more than one-fifth from the entire quantity of meat covered by the description "dressed weight."

The total quantity of the subtraction from dressed weight in the meat supply of 1900 on account of bones and trimmings may be found in Table 26, and also the remaining pounds of edible meat in the dressed weight. In Table 34 the quantity of edible meat in the dressed weight of the quantity retained for consumption is expressed, the computation of this amount for each class of meat animals being desired for the further computation of per capita and per family averages of consumption.

In terms of edible dressed weight, the per family consumption of meat, all kinds included, in 1900 was 680 pounds. As before stated, this quantity does not include the weight of edible parts not included in dressed weight, and is unduly diminished by subtraction of all exports.

TABLE 34.—*Per capita and per family consumption of dressed meat, 1900.*

Class of meat.	Consumption, dressed, in pounds.		Percentage of bones and trimmings in dressed weight.	Consumption of dressed, in pounds of edible, meat.		
	Per capita.	Per private family (4.6 persons).		Number of pounds.	Per capita.	Per private family (4.6 persons).
Veal	10.0	46	30.5	526,830,850	6.9	32
Beef, except veal	77.0	354	24.0	4,448,139,400	58.5	269
Total beef	87.0	400	24.7	4,974,970,250	65.5	301
Lamb	6.2	29	25.5	351,867,225	4.6	21
Mutton, except lamb	8.1	37	25.5	456,015,245	6.0	28
Total mutton	14.3	66	25.5	807,882,470	10.6	49
Pork, including lard	84.5	389	15.0	5,458,389,750	71.8	330
Total	185.8	855	20.4	11,241,242,470	147.9	680

EXTRA EDIBLE PARTS INCLUDED.

WITH DRESSED WEIGHT.

Per capita and per family consumption based upon a combination of dressed weight and of the weight of extra edible parts has been computed with results exhibited in Table 35.

Upon dividing the population into the number of pounds of dressed meat and of the edible parts not included in dressed weight, the average per capita consumption of 10.7 pounds is obtained for veal; 93.8 pounds for beef, except veal; 104.5 pounds for beef, including veal. The low average of 14.9 pounds stands for the per capita consumption of mutton, including lamb. Slightly below the beef consumption is that of pork, including lard, with a per capita ratio of 101; and for all kinds of meat the per capita consumption is 220.5 pounds, or a per family consumption of 1,014 pounds. Expressed otherwise, the average private family consumes yearly slightly more than half a ton of meat.

WITH EDIBLE DRESSED WEIGHT.

A combination of the edible portion of dressed weight with the weight of the edible parts not included in dressed weight, divided by the population, indicates a per capita annual consumption of meat, substantially all edible, amounting to 182.6 pounds. Raised to the basis of an average private family, the annual consumption of edible meat is 840 pounds.

SIGNIFICANCE OF THE THREE RATIOS.

1. The per capita consumption of dressed meat shown in Table 34, computed to be 185.8 pounds, is the ratio which is probably more fairly comparable with ratios established for other countries than the two other ratios herein computed.

2. For the full consumption of meat, as determined in practical trade, a dressed weight should still be employed, but should be increased by the addition of the weight of the extra edible parts. The ratio in this case is 220.5 pounds per capita.

3. For the purposes of nutrition and dietetics, the net or edible dressed weight should be employed and increased by the weight of the extra edible parts. The per capita ratio of meat consumption so expressed is 182.6 pounds of edible meat.

TABLE 35.—*Per capita and per family consumption of meat, dressed and extra edible parts combined.*

Class of meat.	Consumption, dressed and extra edible parts.		Consumption, edible dressed and extra edible parts.	
	Per capita.	Per private family (4.6 persons).	Per capita.	Per private family (4.6 persons).
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
Veal	10.7	49	7.7	35
Beef, except veal	93.8	431	75.3	346
Total beef	104.5	481	83.0	382
Lamb	6.6	30	5.0	23
Mutton, except lamb	8.4	39	6.3	29
Total mutton	14.9	69	11.3	52
Pork, including lard	101.0	465	88.4	407
Total	220.5	1,014	182.6	840

COMPUTED AVERAGE CONSUMPTION NOT UNREASONABLE.

If the foregoing per capita consumptions of meat are unreasonable, then the process by which the meat production and consumption of this country have been estimated stands impeached. A consumption per private family of 4.6 persons of 1,014 pounds of meat in terms of dressed weight and weight of extra edible parts, or, in other words, of meat as purchased by consumers, within a period of one year, requires an average daily consumption of 2.778 pounds. This has been reduced by subtraction for bones and butcher's trimmings to 2.3 pounds of what may be regarded as almost wholly edible meat.

There is another subtraction which should be made, if it could be estimated, and that is the kitchen and table waste. In some dietary studies undertaken by the Office of Experiment Stations of the Department of Agriculture, the fraction of kitchen and table waste has been found to be small, but under conditions in which the utilization of meat as purchased is not under the watchful supervision of an experimenter, the fraction of waste may be supposed to be larger. The testimony of the garbage can indicates a kitchen and table waste of considerable account.

The computed average family consumption of 2.778 pounds of meat per day as purchased includes lard, canned and dried meats, sausages, and other forms and preparations of meat, and it includes the meat, tallow, and lard in the mince pies bought from the baker, to say nothing of meat products in other bakery products.

PER CAPITA EXPORTS.

WOULD INCREASE CONSUMPTION BY ONE-SEVENTH.

The quantity of meat that would need to be eaten per capita and per family if the exports of 1900 had been retained in this country and consumed here is expressed in Table 36, wherein it appears that the average family would need to have increased its meat consumption by 147.3 pounds or 14.5 per cent, which would, perhaps, practically have been a dietetic impossibility, the consumption of other foods remaining the same.

TABLE 36.—*Per capita consumption of exported meat, if retained in this country and consumed, 1900.*

Class of meat.	Pounds, dressed, exported.	Consumption, dressed, in pounds.	
		Per capita.	Per private family (4.6 persons).
Beef	830,855,000	10.93	50.28
Mutton	615,000	.01	.05
Pork, including lard	1,601,565,000	21.07	96.92
Total	2,433,035,000	32.02	147.29

CLASSES OF MEAT AS RELATIVE COMPONENTS IN CONSUMPTION.

SWINE LEAD IN FOOD POUNDS.

The relative importance of the different classes of meat animals as they appear in consumption has been computed for Table 37. In 1900 swine were 49.68 per cent of the total number of animals consumed in this country. The cattle, including calves under 1 year, were 20.94 per cent; and the sheep, including lambs under 1 year, were 29.38 per cent.

The meat percentage for beef is, of course, much higher than that for cattle. In dressed weight the beef is 46.83 per cent; pork, including lard, 45.49 per cent; and the mutton, including lamb, 7.68 per cent.

In terms of dressed weight and weight of extra edible parts, which cover the full meat consumption, beef, including veal, is 47.39 per cent; pork, including lard, is 45.83 per cent; and mutton, including lamb, is 6.78 per cent. In the exports, pork, including lard, is almost two-thirds, and beef a little over one-third.

Upon a basis of food pounds, or the edible dressed meat and extra edible parts, swine rise to the leading place and become 48.39 per cent of the total meat consumption, leaving 45.43 per cent to beef, including veal, and 6.18 per cent to mutton, including lamb.

TABLE 37.—*Percentage of different classes of meat animals and meat in consumption and in exports, 1900.*

Class of meat.	Number of animals consumed.	Total weight in pounds.					
		Dressed.	Edible dressed.	Edible extra parts.	Dressed and edible extra parts.	Edible dressed and extra edible parts.	Exports.
Veal	6.98	5.37	4.68	2.14	4.86	4.20	.....
Beef, except veal	13.96	41.46	39.57	48.29	42.53	41.23	34.15
Total beef	20.94	46.83	44.25	50.43	47.39	45.43	34.15
Lamb	15.28	3.34	3.13	.99	2.98	2.72	.....
Mutton, except lamb	14.10	4.34	4.06	.92	3.80	3.46	.02
Total mutton	29.38	7.68	7.19	1.91	6.78	6.18	.02
Pork, including lard	49.68	45.49	48.56	47.66	45.83	48.39	65.83
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

MEAT CONSUMPTION IN WORKINGMEN'S FAMILIES.

QUANTITY AND COST.

Some information supplementary to the original information collected in this investigation has been found in publications of the United States Bureau of Labor. In 1901 the dietaries of 2,567 workingmen, distributed throughout the United States and among many industries, were ascertained and the principal portion of the meat consumption appears in the food classification adopted by that Bureau. The average number of persons in these families of workingmen is somewhat higher than the average private family of 4.6 persons established by the census, or 0.71 of a person more.

The pounds of meat consumed per family on the average during the year may be found in Table 38. The beef weighed 398.3 pounds; the pork, including lard, 309.1 pounds; the other meat, 77.7 pounds; and the total was 785.1 pounds. It is interesting to note that there was an average supplementary consumption of 67.7 pounds of poultry.

Corresponding to Table 38, representing quantity, is Table 39, representing the cost of the meat consumption of the 2,567 families of workingmen in 1901. The cost for beef was $55.31; for pork, including lard, $37.26; other meat, $9.78; or a total of $102.35. The poultry cost was $9.49.

TABLE 38.—*Consumption of meat by 2,567 families of workingmen in 1901.*

[Bulletin No. 65, Bureau of Labor.]

Class of meat.	Pounds per family.					
	North Atlantic States (1,415 families).	South Atlantic States (219 families).	North Central States (721 families).	South Central States (122 families).	Western States (90 families).	Total (2,567 families).
Beef:						
Fresh	352.2	306.8	363.5	317.4	348.4	349.7
Salt	75.3	9.4	21.3	3.5	3.8	48.6
Total	427.5	316.2	384.8	320.9	352.2	398.3
Hog products:						
Fresh	103.4	85.3	152.6	128.1	28.4	114.2
Salt	95.2	222.0	87.3	248.7	76.6	110.5
Lard	73.8	119.5	89.1	143.3	48.5	84.4
Total	272.4	426.8	329.0	520.1	153.5	309.1
Other meat	98.1	28.1	63.8	11.2	37.8	77.7
Total	798.0	771.1	782.6	852.2	543.5	785.1
Poultry	67.2	73.6	71.3	53.0	53.5	67.7

TABLE 39.—*Cost of meat consumed by 2,567 families of workingmen in 1901.*

[Bulletin No. 65, Bureau of Labor.]

Class of meat.	Cost per family.					
	North Atlantic States (1,415 families).	South Atlantic States (219 families).	North Central States (721 families).	South Central States (122 families).	Western States (90 families).	Total (2,567 families).
Beef:						
Fresh	$54.27	$41.08	$46.06	$37.84	$54.13	$50.05
Salt	8.18	1.13	2.20	.33	.66	5.26
Total	62.45	42.21	48.26	38.17	54.79	55.31
Hog products:						
Fresh	12.83	10.48	18.39	15.60	4.04	14.02
Salt	12.19	26.79	11.25	28.09	11.06	13.89
Lard	8.15	12.72	10.34	14.31	5.44	9.35
Total	33.17	49.99	39.98	58.00	20.54	37.26
Other meat	12.26	3.86	8.68	1.40	5.35	9.78
Total	107.88	96.06	96.92	97.57	80.68	102.35
Poultry	10.18	8.44	9.34	5.93	7.15	9.49

MEAT COST IN POOR FAMILIES.

In connection with the foregoing table relating to cost of meat consumption, Table 40 is offered because indicating comparatively the meat consumption of poor families. The quantity of meat used was not ascertained, and the cost for only five weeks in August, September, and January. Assuming that the five weeks are representative, the year's expense has been computed for each one of the 19 families and for the total.

The computed average expense for meat for one year in the consumption of these 19 poor families is $76.73, of which $27.97 is for beef; $38.11 for pork, including lard; and $10.65 for other meat, including sausage. The cost for poultry is $1.70.

TABLE 40.—*Expenditures for meat by poor families in Washington, D. C., for one year.*

[Bulletin No. 64, Bureau of Labor: Five weeks in August and September, 1905, and January, 1906, × 10.43.]

Family number.	Computed expenditures for one year.				
	Total meat.	Beef.	Hog products.	Other, including sausage.	Poultry.
1	$75.51	$54.65	$9.91	$10.95	$15.65
2	81.46	53.09	23.68	4.69	.....
3	93.34	32.12	50.06	11.16	.....
4	46.51	22.63	16.58	7.30	.....
5	62.90	21.28	34.31	7.31	.....
6	40.68	27.33	8.34	5.01	.....
7	108.99	30.56	63.52	14.91	6.26
8	58.50	22.49	24.96	11.05	.....
9	114.42	36.82	72.91	4.69	.....
10	99.39	9.28	72.80	17.31	.....
11	123.28	36.71	61.85	24.72	.....
12	95.12	27.64	40.05	27.43	.....
13	37.76	16.90	17.63	3.23	.....
14	90.01	17.94	44.12	27.95	.....
15	54.34	23.15	25.24	5.95	.....
16	96.79	30.56	60.49	5.74	.....
17	27.85	19.19	7.30	1.36	.....
18	30.87	25.76	2.82	2.29	.....
19	120.15	23.26	87.61	9.28	10.43
Total	1,457.87	531.36	724.18	202.33	32.34
Average	76.73	27.97	38.11	10.65	1.70

KINDS OF MEAT IN WORKINGMEN'S CONSUMPTION.

The relative importance of the different classes of meat in the total quantity consumed by the 2,567 families of workingmen as shown in Table 38 is exhibited in Table 41, wherein the columns of Table 38 have been converted into percentages.

The entire quantity of meat consumed being 100 per cent, the beef consumption is 50.7 per cent; the consumption of pork, including lard, is 39.4 per cent; and all other meat, 9.9 per cent.

TABLE 41.—*Relative importance in workingmen's families of quantities of meats consumed in 1901.*

[Bulletin 65, Bureau of Labor.]

Class of meat.	Pounds per family in 100 pounds.					
	North Atlantic States (1,415 families).	South Atlantic States (219 families).	North Central States (721 families).	South Central States (122 families).	Western States (90 families).	Total (2,567 families).
Beef:						
Fresh	44.1	39.8	46.4	37.3	64.1	44.5
Salt	9.4	1.2	2.7	.4	.7	6.2
Total	53.5	41.0	49.1	37.7	64.8	50.7
Hog products:						
Fresh	13.0	11.1	19.5	15.0	5.2	14.5
Salt	11.9	28.8	11.2	29.2	14.1	14.1
Lard	9.3	15.5	11.4	16.8	8.9	10.8
Total	34.2	55.4	42.1	61.0	28.2	39.4
Other meat	12.3	3.6	8.8	1.3	7.0	9.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

CONSUMERS' COST PER POUND.

Tables 38 and 39 are related to each other by computing the average cost of meat per pound consumed by the 2,567 families of workingmen. The year was 1901. The cost of fresh beef was 14.3 cents; of salt beef, 10.8 cents; with an average of 13.9 cents for the two.

The fresh pork averaged 12.3 cents; the salt pork, 12.6 cents; the lard, 11.1 cents; and all pork, including lard, 12.1 cents. The other meat had an average cost of 12.6 cents.

In averaging the cost of all classes of meat per pound, 13 cents is the result. That is to say, it cost each workingman's family, on the average, 13 cents per pound for all of the meat bought during the year. The poultry cost was 14 cents per pound.

The foregoing average prices were computed by dividing the total cost of the meat consumed by 2,567 families of workingmen in 1901 by the total number of pounds. Contemporary with this determination of consumers' prices was the determination of retailers' prices by the Bureau of Labor by means of returns made by retail dealers. The average price of fresh beef, for instance, was computed by obtaining a simple average of the prices quoted on the 614 retailers' schedules for fresh beef, and so on with the other items. Consequently the average retailers' prices do not fully agree with consumers' prices based upon statements made by workingmen and their wives and representing total consumption.

The Bureau of Labor's mean retailers' price per pound of fresh beef for 1901 is 14.7 cents; salt beef, 9.3 cents, fresh pork, 13 cents; salt pork, 14.6 cents; lard, 11.9 cents; and other meat, 14.3 cents. No general average for all kinds of meat is published.

TABLE 42.—*Average cost of meat per pound consumed by 2,567 families of workingmen in 1901.*

[Bulletin No. 65, Bureau of Labor.]

Class of meat.	Average cost per pound.						Mean retailers' price per pound.
	North Atlantic States.	South Atlantic States.	North Central States.	South Central States.	Western States.	Total.	
Beef:	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
Fresh	15.4	13.4	12.7	11.9	15.5	14.3	14.70
Salt	10.9	12.0	10.3	9.4	17.4	10.8	9.31
Total	14.6	13.3	12.5	11.9	15.6	13.9	.....
Hog products:							
Fresh	12.4	12.3	12.1	12.2	14.2	12.3	13.00
Salt	12.8	12.1	12.9	11.3	14.4	12.6	14.57
Lard	11.0	10.6	11.6	10.0	11.2	11.1	11.90
Total	12.2	11.7	12.2	11.2	13.4	12.1	.....
Other meat	12.5	13.7	12.6	12.5	14.2	12.6	14.30
Total	13.5	12.4	12.4	11.4	14.8	13.0	.....
Poultry	15.1	11.5	13.1	11.2	13.4	14.0	15.29

TREND OF RETAIL MEAT PRICES, 1890–1905.

BUREAU OF LABOR'S SERIES OF INDEX NUMBERS.

There is a direct and, other things remaining approximately the same, inverse relationship between meat prices and per capita consumption, and so some evidences of the trend of meat prices during a series of years are herewith presented. The Bureau of Labor's index numbers showing the relative retail prices of 10 classes of meat may be found in Table 43, covering sixteen years from 1890 to 1905. The base line is the mean price for the ten years 1890–1899, which is represented by 100. Prices were comparatively low during the period of industrial depression 1893–1897, after which there was a marked advance.

TABLE 43.—*Relative retail prices of meat, 1890–1905.*

[Bulletin No. 65, Bureau of Labor. Mean for 1890–1899=100.]

Year.	Beef, fresh, roasts.	Beef, fresh, steaks.	Beef, salt.	Lard.	Mutton and lamb.	Pork, fresh.	Pork, salt, bacon.	Pork, salt, dry or pickled.	Pork, salt, ham.	Veal.
1890	99.5	98.8	97.5	98.2	100.7	97.0	95.8	95.3	98.7	98.8
1891	100.0	99.4	98.3	99.8	100.6	98.7	96.6	98.9	99.3	99.6
1892	99.6	99.3	99.5	103.6	101.0	100.5	99.1	100.5	101.9	100.0
1893	99.0	99.6	100.3	117.9	99.9	107.0	109.0	108.7	109.3	100.0
1894	98.3	98.2	98.9	106.9	97.8	101.8	103.6	103.4	101.9	98.7
1895	98.6	99.1	99.6	100.1	98.7	99.7	99.4	99.2	98.8	98.5
1896	99.1	99.5	99.8	92.5	98.7	97.4	96.7	95.5	97.6	99.5
1897	100.3	100.2	100.9	89.8	99.6	97.6	97.4	97.3	98.2	99.9
1898	101.7	102.0	102.1	93.9	100.4	98.6	100.2	99.1	95.1	101.2
1899	103.7	103.9	103.2	97.1	102.6	101.7	102.9	101.8	99.2	103.7
1900	106.5	106.4	103.7	104.4	105.6	107.7	109.7	107.7	105.3	104.9
1901	110.7	111.0	106.1	118.1	109.0	117.9	121.0	117.5	110.2	108.8
1902	118.6	118.5	116.0	134.3	114.7	128.3	135.6	132.5	119.4	115.2
1903	113.1	112.9	108.8	126.7	112.6	127.0	139.8	129.0	121.3	114.9
1904	112.8	113.4	108.3	117.3	114.1	124.0	137.9	125.8	118.4	115.5
1905	112.2	112.9	107.9	116.6	117.8	126.6	138.8	126.0	118.5	117.7

RETAIL MEAT PRICES AND FARM ANIMAL PRICES COMPARED.

The index numbers of Table 43 have been reduced to four-year means in Table 44 in order that increases may more sharply appear, and these increases are expressed in Table 44 in the form of percentages of the last four-year period, 1902–1905, over each of the two preceding four-year periods.

In connection with this treatment of the index numbers of the Bureau of Labor standing for the relative retail prices of specified descriptions of meat, the mean annual prices of meat animals at the farm for the same four-year periods have been computed from the reports of the Bureau of Statistics of this Department and the increases are expressed in percentages as in the case of the index numbers representing the relative retail prices of meat.

Upon comparing the percentages of increase of the relative retail prices of meat with those representing the prices of meat animals, it is indicated that the farmer and rangeman have shared in the increase of retail meat prices. This conclusion may be verified by an examination of the last two columns of Table 44.

TABLE 44.—*Relative retail prices of meat, and prices of meat animals at the farm; means for 1890–1893, 1894–1897, 1902–1905.*

Class of meat, or animals.	Retail meat prices: mean for 1890–1899=100.			Percentage of increase.	
	1890–1893	1894–1897	1902–1905	1902–1905 over 1890–1893	1902–1905 over 1894–1897
	Index number.	*Index number.*	*Index number.*		
Beef, fresh, roasts	99.5	99.1	114.2	14.8	15.2
Beef, fresh, steaks	99.3	99.2	114.4	15.2	15.3
Beef, salt	98.9	99.8	110.3	11.5	10.5
Lard	104.9	97.3	123.7	17.9	27.1
Mutton and lamb	100.6	98.7	114.8	14.1	16.3
Pork, fresh	100.8	99.1	126.5	25.5	27.6
Pork, salt, bacon	100.1	99.3	138.0	37.9	39.0
Pork, salt, dry or pickled	100.9	98.9	128.3	27.2	29.7
Pork, salt, ham	102.3	99.1	119.4	16.7	20.5
Veal	99.6	99.2	115.8	16.3	16.7
MEAT ANIMALS AT THE FARM.					
Cattle:	*Price.*	*Price.*	*Price.*		
Milch cows	$21.73	$22.36	$29.02	33.5	29.8
Other	15.09	15.31	17.17	13.8	12.1
Sheep	2.50	1.77	2.67	6.8	50.8
Swine	4.97	4.85	6.74	35.6	39.0

DUN'S SERIES OF WHOLESALE MEAT PRICES.

As part of the evidence concerning the relative price of meat, Table 45 is offered. This contains Dun's series of index numbers representing the relative wholesale prices of all meats, 1860 to 1906, as for July 1. The index numbers are in gold.

TABLE 45.—*Dun's index numbers for wholesale prices of meats, 1860–1906.*

July 1—	Index number.	July 1—	Index number.	July 1—	Index number.
1860	$8,973	1876	$10,726	1892	$8,700
1861	7,485	1877	10,036	1893	10,135
1862	7,150	1878	8,181	1894	9,389
1863	10,115	1879	8,239	1895	8,622
1864	15,685	1880	9,230	1896	7,058
1865	16,112	1881	11,381	1897	7,529
1866	17,153	1882	13,740	1898	7,694
1867	14,278	1883	11,210	1899	7,988
1868	13,210	1884	11,172	1900	8,906
1869	13,181	1885	9,205	1901	9,430
1870	14,161	1886	8,906	1902	11,628
1871	12,177	1887	8,667	1903	9,269
1872	11,055	1888	9,416	1904	9,033
1873	10,114	1889	8,244	1905	8,614
1874	11,560	1890	8,036	1906	9,677
1875	13,287	1891	9,217		

CONSUMERS' YEARLY MEAT BILL.

TOTAL FOR THE PEOPLE OF THE UNITED STATES.

The retail prices of meat during the past few years have excited much attention and discussion. The interest in the matter for the purpose of this bulletin relates to the per capita consumption of meat, which is affected by changes in retail prices. Concerning some of the causes of the increase in the retail price of meat in recent years, an article in the Breeder's Gazette (Chicago), of September 5, 1906, may be consulted.

The total cost of the meat consumed in the United States annually, computed with the average consumers' prices, is expressed in the Report of the Secretary of Agriculture for 1906, the cost being reckoned upon a stationary consumption:

> Meat consumers, as well as farmers who are meat producers, have concern with the national dietary. This nutritive element contributes one-third or more of the total assimilated nutrients of the dietary, both in pounds of protein, or flesh-forming material, and in calories of energy. In expense to the consumer the fraction is undoubtedly much larger. The investigations of the National Bureau of Labor into the retail prices of food indicate, for the many representative family budgets included in the investigations, that the average retail price of meat, for all kinds in the proportions of actual consumption, was $12\frac{3}{4}$ cents in 1900, 13 cents in 1901, and $13\frac{1}{2}$ cents in 1905; the average increased, perhaps, to $13\frac{3}{4}$, or at the most to 14, cents in 1906.
>
> At these average meat prices and with the meat consumption of 1900, the national retail meat bill was $2,052,279,000 in 1900, and it was $2,303,578,000 to $2,345,461,000 in 1906. Every increase of one-fourth of a cent per pound in the national average retail price of meat raises the total yearly expense to consumers by $41,883,000. The increase of 1 cent a pound since 1900 cost consumers this year $167,533,000.

MEAT IN THE DIETARY.

LIMITED BY OTHER FOODS.

RELATIVE PLACE IN FAMILY EXPENSES.

The interest that this investigation has in dietaries is confined to the nutritive equivalence of meats with other foods, in order that the apparent diminishing per family consumption of meat may be explained and in order that future changes in the relative contribution of meat to the dietary may not appear impossible.

As measured by expense, the place that meat occupies in the dietary has been determined by the United States Bureau of Labor for 2,567 families of workingmen living in all parts of the United States and employed in numerous industries. The statement contained in Table 46 embraces the entire expenditure of these families. Over two-fifths, or 42.54 per cent, of the total expenditure was for food and 13.32 per cent was for meat. Of the total food expense meat is 31.31 per cent. The percentage, 13.32, that meat is of the entire expenditure for living is composed of 6.51 for beef, 4.85 for pork, including lard, and 1.96 for other meat.

TABLE 46.—*Relation of meat cost to total food cost and other costs of living in expenditures of workingmen's families, 1901.*

[Bulletin No. 65, United States Bureau of Labor.]

Item.	Expenditure of 2,567 families.		Item.	Expenditure of 2,567 families.	
	Average.	Per cent.		Average.	Per cent.
Beef	$50.05	6.51	Fruit	$16.52	2.15
Pork, including lard	37.26	4.85	Vinegar, pickles, and condiments	4.12	.54
Other meat	15.04	1.96	Other food	20.40	2.65
Total meat	102.35	13.32	Total food	326.90	42.54
Milk	21.32	2.77	Rent and interest on mortgage	103.47	13.47
Butter	28.76	3.74	Fuel	32.23	4.19
Cheese	2.62	.34	Lighting	8.15	1.06
Poultry	9.49	1.24	Clothing	107.84	14.04
Eggs	16.79	2.19	Life insurance	19.44	2.53
Fish	8.01	1.04	Furniture and utensils	26.31	3.42
Tea	5.30	.69	Intoxicating liquors	12.44	1.62
Coffee	10.74	1.40	Tobacco	10.93	1.42
Sugar	15.76	2.05	Sickness and death	20.54	2.67
Molasses	1.69	.22	Other purposes	100.29	13.04
Flour and meal	16.76	2.18	Total expenditure	768.54	100.00
Bread	12.44	1.62			
Rice	2.05	.27			
Potatoes	12.93	1.68			
Other vegetables	18.85	2.45			

NUTRITIVE EQUIVALENCE OF MEAT AND OTHER FOODS.

The somewhat common, but decidedly vague, belief that the consumption of food per capita or per standard individual can keep on increasing indefinitely is due to a failure to understand that there are equivalents in the nutritive elements of assimilated foods in results that are known as growth, repair of waste, heat, energy, and, if there is then a surplus, the storage of fat for future heat and energy if required.

Investigators have established a certain weight of protein and a certain number of calories of energy as necessary to the nutrition of a man doing a certain description of work. He needs certain supplies of protein and energy in the form of assimilated food for his maintenance, and he may eat more than he needs if he will store the excess as fat or reject it unassimilated, but the excess has a practical and short limit, and if this is exceeded there is an invitation to pathological conditions which demand correction of the overindulgence.

Subject to some qualification arising from overeating, the nutritive contribution of meat to the dietary must diminish if the contributions from other descriptions of food are increased. In other words, the total food which the body can receive has a practical limit, although one of some elasticity, so that a considerable increase of one article, or group of articles, of food must cause some displacement of another article, or group of articles, in the previous dietary.

On this account meat seems to have been reduced relatively in the dietaries of the people of this country. Sugar, an energy-supplying food, has increased in consumption per capita from 14.1 pounds in 1840 to 30.5 pounds in 1860, to 42.9 pounds in 1880, to 52.8 pounds in 1890, to 65.2 pounds in 1900, and to 76.1 pounds in 1906.

It seems certain that the per capita consumption of wheat has increased considerably within the period of a generation. The estimate of the statistician of this Department years ago that this consumption was about $4\frac{2}{3}$ bushels, made after the best possible investi-

gation, has been raised in more recent years until now it seems probable that this consumption is nearly, if not quite, 1 bushel more—an increase of more than one-fifth in wheat nutrients per capita.

An immense industry in canning and drying fruits, berries, and vegetables has grown up mostly since 1880 and largely since 1890, with a marked impression upon the dietary of the people. In consequence of this industry and also of cold storage and the long-distance transportation of fresh fruit, berries, and vegetables, this class of foods has lost its exclusively seasonal supply of former years and is now had in a liberal degree throughout the entire year.

It can hardly be questioned that the consumption of eggs and poultry per capita has increased in a large degree during the last quarter century or so, but in what degree this increase has taken place no estimate can satisfactorily determine.

In consequence of the large increases in the classes of nutrients above mentioned in the general dietary, and notwithstanding the possible demand for more energy-producing nutriment and more material for repair than before, it is easy to understand that meat should have lost some of its old-time importance in the dietary. There are rough indications that meat constituted about one-half of the nutritive elements of the dietary of half a century ago in terms of both protein and energy; at present the fraction seems to have fallen to one-third, or thereabouts.

The foregoing remarks concerning the nutritive equivalence of foods are illustrated quantitatively in Table 47, wherein may be found statements of the quantities of meat of various descriptions required to equal the protein and energy of certain quantities of specified foods. For instance, the yearly consumption of sugar per family has increased since 1875 about 140 pounds, and in a considerable degree this sugar increase has displaced other nutrients in the dietary. A displacement of meat in the dietary equivalent to 140 pounds of sugar in terms of energy is computed at 264.4 pounds of sirloin beef, or 349.5 pounds of round beef, or 155.9 pounds of cured ham, or 61.7 pounds of lard.

To select a prominent nitrogenous food, rolled oats may be mentioned. For every 100 pounds of rolled oats added to the national dietary during past years, if there was an equivalent displacement of meat, computations of the meat equivalent indicate for protein 101.7 pounds of sirloin beef, 87.7 pounds of round beef, 183.1 pounds of cured bacon, and for energy 187.8 pounds of sirloin beef, 248.3 pounds of round beef, and 68.9 pounds of cured bacon.

TABLE 47.—*Quantity of meat as purchased required to equal the protein and energy of specified foods.*[a]

TO EQUAL ONE BARREL (196 POUNDS) OF WHEAT FLOUR.

Class of meat.	Pounds of meat required to supply the—		Class of meat.	Pounds of meat required to supply the—	
	Protein.	Energy.		Protein.	Energy.
Beef:			Pork:		
Sirloin	130.7	326.3	Ham, cured	145.0	192.5
Round	112.6	431.5	Bacon, cured	235.2	119.7
Corned	151.2	252.9	Lard		76.2
			Mutton: Leg	140.2	357.2

[a] Tables 47 and 48 depend for the nutrition facts used in the computations upon the publications of the Office of Experiment Stations of this Department, but that Office should not be held responsible for the use herein made of them.

TABLE 47.—*Quantity of meat as purchased required to equal the protein and energy of specified foods*—Continued.

TO EQUAL 140 POUNDS OF SUGAR.

Class of meat.	Pounds of meat required to supply the—		Class of meat.	Pounds of meat required to supply the—	
	Protein.	Energy.		Protein.	Energy.
Beef:			Pork:		
Sirloin	0.0	264.4	Ham, cured	0.0	155.9
Round	.0	349.5	Bacon, cured	.0	97.0
Corned	.0	204.9	Lard	.0	61.7
			Mutton: Leg	.0	289.3

TO EQUAL 100 POUNDS OF OATS, ROLLED.

Beef:			Pork:		
Sirloin	101.7	187.8	Ham, cured	112.9	110.8
Round	87.7	248.3	Bacon, cured	183.1	68.9
Corned	117.7	145.6	Lard		43.8
			Mutton: Leg	109.1	205.6

TO EQUAL 100 POUNDS OF NAVY BEANS, DRIED.

Beef:			Pork:		
Sirloin	138.9	162.94	Ham, cured	154.1	96.11
Round	119.6	215.44	Bacon, cured	250.0	59.78
Corned	160.7	126.28	Lard		38.03
			Mutton: Leg	149.0	178.33

TO EQUAL 100 POUNDS OF PEAS, CANNED.

Beef:			Pork:		
Sirloin	22.2	25.9	Ham, cured	24.7	15.3
Round	19.2	34.2	Bacon, cured	40.0	9.5
Corned	25.7	20.1	Lard		6.0
			Mutton: Leg	23.8	28.3

TO EQUAL 100 POUNDS OF GREEN CORN, FRESH.

Beef:			Pork:		
Sirloin	7.4	18.27	Ham, cured	8.2	10.78
Round	6.4	24.16	Bacon, cured	13.3	6.70
Corned	8.6	14.16	Lard		0.0
			Mutton: Leg	8.0	20.00

TO EQUAL 100 POUNDS OF PEACHES, CANNED.

Beef:			Pork:		
Sirloin	4.3	22.3	Ham, cured	4.8	13.2
Round	3.7	29.5	Bacon, cured	7.8	8.2
Corned	5.0	17.3	Lard		5.2
			Mutton: Leg	4.6	24.4

TO EQUAL 100 POUNDS OF PRUNES, DRIED.

Beef:			Pork:		
Sirloin	11.1	120.8	Ham, cured	12.3	71.3
Round	9.6	159.7	Bacon, cured	20.0	44.3
Corned	12.9	93.6	Lard		28.2
			Mutton: Leg	11.9	132.2

TABLE 47.—*Quantity of meat as purchased required to equal the protein and energy of specified foods*—Continued.

TO EQUAL 100 POUNDS OF BANANAS.

Class of meat.	Pounds of meat required to supply the—		Class of meat.	Pounds of meat required to supply the—	
	Protein.	Energy.		Protein.	Energy.
Beef:			Pork:		
Sirloin	4.9	30.5	Ham, cured	5.5	18.0
Round	4.3	40.3	Bacon, cured	8.9	11.2
Corned	5.7	23.6	Lard		7.1
			Mutton: Leg	5.3	33.3

TO EQUAL 10 POUNDS OF PEANUT KERNELS.

Beef:			Pork:		
Sirloin	15.9	26.0	Ham, cured	17.7	15.3
Round	13.7	34.4	Bacon, cured	28.7	9.5
Corned	18.4	20.1	Lard		6.1
			Mutton: Leg	17.1	28.4

TO EQUAL 10 POUNDS OF CHOCOLATE.

Beef:			Pork:		
Sirloin	8.0	29.0	Ham, cured	8.8	17.1
Round	6.9	38.4	Bacon, cured	14.3	10.7
Corned	9.2	22.5	Lard		6.8
			Mutton: Leg	8.5	31.8

COST OF SUBSTITUTES FOR MEAT.

The expense of substituting one food for another in the dietary presents limits which at times are wide and at other times narrow and always encounters the obstacle of food habits; but in some degree the expense of substitution may have its effects, and for the purpose of providing some facts concerning the question Table 48 has been prepared. This table exhibits the quantities of nutriment in terms of protein and energy that were bought at retail for 10 cents in ordinary experience in Washington, D. C., throughout 1906.

While it is true that the masses of the people are not experts in nutrition and do not deliberately select foods because of certain nutritive elements, after all, when price or cost of food and of living begin to exert a pressure, there is a drifting toward the cheaper nutrients which, in the case of a highly mixed diet, are in a considerable degree selected without any distinctive thoughts concerning nutrition.

According to Table 48, with round beef selling at 12½ cents per pound, 68.1 grams of protein were bought for 10 cents; whereas for the same 10 cents rolled oats containing 151.5 grams of protein were bought, wheat flour containing 148.4 grams, and corn meal containing 208.7 grams.

With round beef at 12½ cents a pound, 10 cents bought 611 calories of energy; and the same 10 cents bought granulated sugar containing 3,720 calories of energy, rolled oats containing 3,700 calories, wheat flour containing 4,970 calories, corn meal containing 8,275 calories, potatoes containing 1,540 calories, cabbage containing 710 calories, and dried apples containing 900 calories.

It is thus apparent that the holder of the family purse, when subject to some necessity of choosing among foods on account of expense, may reduce the quantity of meat bought and turn to other foods containing cheaper nutrients, even though merely as a result of a vague perception of the nutritive sufficiency of foods other than meats.

TABLE 48.—*Comparative cost of nutrients in different foods.*

Article.	Price per pound as purchased.	Purchased for 10 cents.		Article.	Price per pound as purchased.	Purchased for 10 cents.	
		Protein.	Energy.			Protein.	Energy.
Beef:	*Cents.*	*Grams.*	*Calories.*	Vegetables:	*Cents.*	*Grams.*	*Calories.*
Sirloin	15.0	49.0	657	Beans, dried	5.0	201.1	3,210
Round	12.5	68.1	611	Beans, lima, canned	12.0	15.1	300
Rib roast	15.0	42.6	866	Tomatoes, canned	3.3	16.5	318
Corned	6.0	115.7	2,325	Onions	3.0	21.8	676
Mutton:				Sweet corn, canned	5.0	25.4	910
Chuck	6.0	86.9	2,231	Cabbage	1.5	41.2	710
Leg	15.0	45.2	601	Peas, canned	6.0	27.2	558
Pork:				Potatoes	2.0	39.9	1,540
Ham, cured	15.0	45.3	1,163	Sweet potatoes	2.5	26.1	1,824
Bacon, cured	12.5	32.8	2,140	Beets	2.5	23.2	688
Lard	12.0	0.0	3,517	Carrots	2.0	20.0	840
Dressed chicken	18.0	35.5	430	Pumpkins	2.0	11.1	300
Eggs	16.7	34.0	385	Spinach	1.3	55.1	636
Butter	25.0	1.8	1,442	Squash	2.0	15.9	538
Cheese, full cream	20.0	58.7	965	Turnips	2.0	20.6	647
Fish:				Fruit:			
Mackerel, fresh	20.0	24.6	191	Apples	4.0	3.4	544
Mackerel, salt	15.0	51.3	691	Apples, dried	15.0	4.8	900
Cod, fresh	11.0	30.6	137	Peaches, canned	8.3	5.8	265
Cod, salt	12.5	58.6	246	Blackberries	12.5	4.7	216
Halibut steak, fresh	20.0	34.3	233	Grapes	5.0	6.8	502
Red snapper	16.0	29.3	138	Raspberries	18.0	4.3	172
Sugar, granulated	5.0	0.0	3,720	Strawberries	6.0	7.6	300
Cane sirup	5.0	21.8	2,580	Prunes, dried	8.0	10.1	1,488
Honey	15.0	1.2	1,013	Beverages:			
Cereals:				Milk	3.0	49.9	1,083
Rolled oats	5.0	151.5	3,700	Cocoa[a]	25.0	39.2	928
Wheat flour	3.3	148.4	4,970	Chocolate[a]	35.0	16.7	817
Cream of wheat	7.5	67.1	2,247	Miscellaneous:			
Wheat bread	5.0	83.5	2,410	Peanuts	2.5	353.6	7,734
Macaroni	15.0	40.5	1,110	Walnut kernels (Cal.)	15.0	50.2	2,190
Corn meal	2.0	208.7	8,275				
Hominy	10.0	37.6	1,650				
Crackers	10.0	48.5	1,905				

[a] Not the infusion, but the substance from which the beverage is made.

FOREIGN MEAT CONSUMPTION.

UNITED KINGDOM.[a]

INVESTIGATION BY ROYAL STATISTICAL SOCIETY.

In the second report, November 17, 1903, of "the committee appointed to inquire into the statistics available as a basis for estimating the production and consumption of meat and milk in the United Kingdom," appointed by the Royal Statistical Society, the details of estimating the annual slaughter are presented and the processes are so interesting and instructive that statements of the processes followed are herewith presented, though necessarily much condensed.

[a] Matter under this head is condensed and copied from the following issues of the Journal of the Royal Statistical Society: Vol. LXV, part 2; Vol. LXV, part 4; and Vol. LXVII, part 3.

TABLE 49.—*Estimate of cattle slaughter in the United Kingdom, 1898–1902.*

[000 omitted.]

Item.	1898–1899	1899–1900	1900–1901	1901–1902	1902–1903	Average for five years, 1898–1902
Total cattle enumerated at beginning of year	11,149	11,345	11,455	11,478	11,377	11,361
Number of calves born, 90 per cent of cows and heifers	3,632	3,720	3,687	3,692	3,676	3,681
	14,781	15,065	15,142	15,170	15,053	15,042
Less mortality at 4 per cent	591	603	606	607	602	602
	14,190	14,462	14,536	14,563	14,451	14,440
Less number enumerated at end of year or exported during the year	11,348	11,458	11,480	11,379	11,411	11,415
Total cattle slaughtered	2,842	3,004	3,056	3,184	3,040	3,025
Per cent of number enumerated	25.5	26.5	26.7	27.7	26.7	26.6

Table 49 includes cattle of all ages, but some indication of the number of calves slaughtered may be obtained by deducting from the number estimated as born during the year (after allowing for deaths) the number returned as under 1 year at the end of the year. From the result of this method, compared with independent estimates submitted by butchers and others to the committee of the Royal Statistical Society, it appears reasonable to assume that on an average out of every 100 cattle of all ages slaughtered, 70 will be beef cattle and 30 calves. On this basis the average beef-cattle slaughter during the five years 1898–1902 numbered 2,118,000 and the calf slaughter 907,000.

TABLE 50.—*Estimate of sheep slaughter in the United Kingdom, 1898–1902.*

[000 omitted.]

Item.	1898–1899	1899–1900	1900–1901	1901–1902	1902–1903	Average for five years, 1898–1902
Total number of sheep enumerated beginning of year	31,102	31,680	31,055	30,830	30,057	30,945
Number of lambs born during the year, 112 per cent of ewes enumerated at end of year	13,670	13,642	13,309	13,085	12,863	13,314
	44,772	45,322	44,364	43,915	42,920	44,259
Less mortality at 4¼ per cent	1,903	1,926	1,885	1,866	1,824	1,881
	42,869	43,396	42,479	42,049	41,096	42,378
Deduct number enumerated at the end of the year or exported during the year	31,690	31,062	30,834	30,060	29,663	30,662
Total number of sheep and lambs slaughtered	11,179	12,334	11,645	11,989	11,433	11,716
Per cent of number enumerated	35.9	39.0	37.5	39.0	38.0	37.9

After many inquiries, the committee of the Royal Statistical Society believes "that the estimate that 20 per cent represents the proportion of the whole number of sheep and lambs slaughtered which are sold for lamb may be taken as substantially correct." Consequently, as an average for the five years 1898–1902 the number of slaughtered sheep was 9,373,000 and the lambs 2,343,000.

TABLE 51.—*Estimate of swine slaughter in the United Kingdom, 1898–1902.*

[000 omitted.]

Item.	1898–1899	1899–1900	1900–1901	1901–1902	1902–1903	Average for five years, 1898–1902
Total swine enumerated at beginning of year	3,719	4,004	3,664	3,411	3,640	3,688
Number of pigs born at 11 per sow	5,483	5,765	5,170	4,973	5,419	5,362
	9,202	9,769	8,834	8,384	9,059	9,050
Less mortality at 9 per cent	828	879	795	755	815	815
	8,374	8,890	8,039	7,629	8,244	8,235
Less number enumerated at end of year	4,004	3,664	3,411	3,640	4,086	3,761
Total slaughtered	4,370	5,226	4,628	3,989	4,158	4,474
Per cent of number enumerated	117.5	130.5	126.3	116.9	114.2	121.3

MEAT SUPPLY.

Table 52 presents the quantity of the home production of meat in the United Kingdom and the imports of meat, and it appears that the total home production, the average of 1898–99 to 1902–3 being adopted, is 2,790,860,800 pounds and the imports 2,217,474,560 pounds, or a total of 5,008,335,360 pounds, mostly dressed weight, approximately constituting the consumption. As elements of home meat production, beef, including veal, is 53.18 per cent; mutton, including lamb, is 25.19 per cent; and pork, probably including some lard, is 21.63 per cent. Parallel percentages for imports give to the total beef imports 39.03 per cent of the total imports of meat, to the total mutton imports 19.51 per cent, and to the pork imports 41.46 per cent of the total meat.

TABLE 52.—*Meat supply of the United Kingdom, average of 1898–1902.*

[Exports not considered, because not separated into classes of meat.]

Class of meat.	Total weight.			
	Home production.		Imports.	
	Pounds.	Per cent.	Pounds.	Per cent.
Veal	86,163,840	3.09		
Beef, except veal	1,397,880,960	50.09	865,536,000	39.03
Total beef	1,484,044,800	53.18	865,536,000	39.03
Lamb	93,728,320	3.36		
Mutton, except lamb	609,232,960	21.83	432,656,000	19.51
Total mutton	702,961,280	25.19	432,656,000	19.51
Pork, excluding lard	603,854,720	21.63	919,282,560	41.46
Total	2,790,860,800	100.00	2,217,474,560	100.00

PER CAPITA CONSUMPTION.

The per capita consumption of meat in the United Kingdom is estimated to be 121.8 pounds as a yearly average for the five years ending June, 1903, and in this average consumption home-produced meat contributes 67.5 pounds and the imported meat 54.3 pounds.

The fraction of the existing animals slaughtered during the year is 27 per cent for cattle, including calves; 38 per cent for sheep, including lambs; and 121 per cent for swine. The fraction of the swine slaughtered is especially noteworthy when compared with the fraction of 77.5 per cent in this country. The reason why the British percentage is higher than that of the United States is because the British swine have a higher fecundity, more litters, and a lower rate of mortality.

The British per capita consumption of meat, to the extent that it consists of home production, is based mostly upon dressed weight, since the Committee of the Royal Statistical Society was practically unable to make an estimate for the extra edible parts of meat animals.

TABLE 53.—*Per capita consumption of meat in the United Kingdom, average of 1898–1902.*

Class of meat.	Per capita consumption.			Percentage of existing animals slaughtered.
	Home produced.	Imported.	Total.	
	Pounds.	*Pounds.*	*Pounds.*	*Per cent.*
Beef, including veal	35.9	20.9	56.8	27
Mutton, including lamb	17.0	10.5	27.5	38
Pork	14.6	22.2	36.8	121
Total	67.5	[a] 54.3	[a] 121.8	.....

[a] These totals are adjusted by deducting the exports and adding the imported "meat unenumerated," which can not be apportioned.

NOTE.—"It is necessary to remember that these figures do not purport to represent literally the whole consumption of meat. There is a certain quantity of meat, comprised in what butchers term the 'fifth quarter,' which is not included, and a considerable quantity of poultry, game, and rabbits must be added before the carnivorous demands of the population can be said to have been entirely met."—Report of Committee.

Estimates of per capita consumption for various classes of consumers were ventured by the Committee, with the very interesting comparisons to be found in Table 54. The per capita consumption of artisans, mechanics, and laborers is estimated to be 107 pounds; of the lower middle class, 122 pounds; of the middle class, 182 pounds; of the upper class, 300 pounds. In comparison with these averages it may be remembered that the average per capita consumption of dressed meat in the United States in 1900 was 185.8 pounds.

TABLE 54.—*Consumption of meat per year in the United Kingdom, by classes of the population.*

Class.	Pounds per capita.
Artisans, mechanics, and laborers	107
Lower middle class	122
Middle class	182
Upper class	300

GERMANY.

RECORDS OF OFFICIAL INSPECTION.

The best estimate of production and per capita consumption of meat offered by any country comes from Germany and this is on account of the slaughter and inspection law of 1904. From German official records, supplemented by a small fraction of estimates, Table 55 has been constructed and therein it appears that the total meat consumption of the German Empire in 1904 was 6,445,218,000 pounds, of which the net imports were only 367,369,000 pounds. The production figures do not include the weight of extra edible parts.

During the next year, 1905, the meat consumption declined to 6,090,018,000 pounds, but in the meantime the net imports rose to 478,126,000 pounds, so that the loss in home production was greater than the loss in consumption.

Again, in 1906, there was a reduction of meat consumption, although a slight one, the figures being 6,028,487,000 pounds, and the element of net imports still increased and rose to 499,040,000 pounds.

The foregoing figures of total meat consumption include, mostly in the element of home production, much horse and goat meat, and a small quantity of "all other," which does not include dog meat.

During the three years of meat consumption in the German Empire under review, the per capita consumption declined from 108.5 pounds in 1904 to 101.1 pounds in 1905, and 98.7 pounds in 1906, the estimated population at the middle of each year being adopted as the divisor.

In 1906 the per capita consumption of beef, including veal, was 33.7 pounds; of mutton, including lamb, 2.1 pounds; of pork, including lard, 60.8 pounds; of beef, mutton, and pork, 96.6 pounds. The amount of goat meat consumed made a per capita ratio of 0.9 of a pound; of horse meat, 1.2 pounds; of "other" meat, too small for expression; or a total of goat, horse, and "all other" meat amounting to 2.1 pounds, to be added to the total for beef, mutton, and pork. All kinds of meat specified above being included, the per capita consumption of meat in Germany for 1906 was 98.7 pounds.

The relative proportions in which the different classes of meat are found in German consumption is expressed in percentages in Table 55. In 1906, beef, including veal, constituted 34.1 per cent of the total meat consumption; mutton, including lamb, 2.1 per cent; pork, including lard, 61.7 per cent; goat meat, 0.9 of 1 per cent; and horse meat, 1.2 per cent.

7840—No. 55—07——7

TABLE 55.—*Meat production, imports, and consumption in Germany, 1904–1906.*[a]

Class of meat.	Slaughterings inspected.	Home slaughterings.[b]	Total domestic slaughterings.	Average dressed meat weight.	Total meat weight.	Meat condemned.[c]	Meat of domestic slaughtering consumed.
1904.	*Head.*	*Head.*	*Head.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Veal	4,287,000	82,000	4,369,000	88.185	385,311,000	1,213,000	384,098,000
Beef, except veal	3,329,000	89,000	3,418,000	518.086	1,770,955,000	18,378,000	1,752,577,000
Total beef	7,616,000	171,000	7,787,000	.....	2,156,266,000	19,591,000	2,136,675,000
Mutton, including lamb	2,269,000	628,000	2,897,000	44.092	127,736,000	107,000	127,629,000
Pork, including lard	15,066,000	5,933,000	20,999,000	176.370	3,753,631,000	3,988,000	3,699,693,000
Total	24,951,000	6,732,000	31,683,000	.....	5,907,633,000	23,686,000	5,903,907,000
Goat	424,000	734,000	1,158,000	44.092	51,055,000	56,000	50,999,000
Horse	123,000	.....	123,000	518.086	63,604,000	751,000	62,853,000
All other	.....	.....	.....	.....	.....	.....	.....
Total	547,000	734,000	1,281,000	.....	114,659,000	807,000	113,852,000
Grand total	25,498,000	7,466,000	32,964,000	.....	6,102,292,000	24,493,000	6,077,849,000
1905.							
Veal	5,332,000	82,000	5,414,000	88.185	477,438,000	1,499,000	475,939,000
Beef, except veal	2,717,000	89,000	2,806,000	518.086	1,454,102,000	15,080,000	1,439,082,000
Total beef	8,049,000	171,000	8,220,000	.....	1,931,000,000	16,579,000	1,915,021,000
Mutton, including lamb	2,436,000	628,000	3,064,000	44.092	135,115,000	113,000	135,002,000
Pork, including lard	13,573,000	[c]5,933,000	19,506,000	176.370	3,440,264,000	4,707,000	3,435,557,000
Total	24,058,000	6,732,000	30,790,000	.....	5,506,979,000	21,399,000	5,485,580,000
Goat	429,000	[c]734,000	1,163,000	44.092	51,299,000	56,000	51,243,000
Horse	147,000	.....	147,000	518.086	75,965,000	896,000	75,069,000
All other	.....	.....	.....	.....	.....	.....	.....
Total	576,000	734,000	1,310,000	.....	127,264,000	952,000	126,312,000
Grand total	24,634,000	7,466,000	32,100,000	.....	5,634,243,000	22,351,000	5,611,892,000
1906.							
Veal	5,134,000	82,000	5,216,000	88.185	459,924,000	1,444,000	458,480,000
Beef, except veal	2,678,000	89,000	2,767,000	518.086	1,433,900,000	14,870,000	1,419,030,000
Total beef	7,812,000	171,000	7,983,000	.....	1,893,824,000	16,314,000	1,877,510,000
Mutton, including lamb	2,295,000	628,000	2,923,000	44.092	128,904,000	108,000	128,796,000
Pork, including lard	13,342,000	5,933,000	19,275,000	176.370	3,399,622,000	3,604,000	3,396,018,000
Total	23,449,000	6,732,000	30,181,000	.....	5,422,350,000	20,026,000	5,402,324,000
Goat	451,000	[c]734,000	1,185,000	44.092	52,248,000	57,000	52,191,000
Horse	146,000	.....	146,000	518.086	75,827,000	895,000	74,932,000
All other	.....	.....	.....	.....	.....	.....	.....
Total	597,000	734,000	1,331,000	.....	128,075,000	952,000	127,123,000
Grand total	24,046,000	7,466,000	31,512,000	.....	5,550,425,000	20,978,000	5,529,447,000

[a] Die Ergebnisse der Schlachtvieh- und Fleischbeschau im Deutschen Reiche, 1904. Vierteljahrshefte zur Statistik des Deutschen Reichs, Jan. 1907. Auswärtiger Handel des deutschen Zollgebiets, 1905. Monatliche Nachweise über den auswärtigen Handel Deutschlands, Dec. 1906.

[b] For 1904 the data for home slaughterings refer to the year ending November 30, 1904. Since later data were not available, the same quantities were carried over from 1904 to 1905 and 1906. The error committed is believed to be small.

[c] Since data for meat condemned were not available later than for 1904, it was assumed that an equal percentage was condemned in all the three years and the quantities for 1905 and 1906 were calculated accordingly. The error committed is believed to be small.

TABLE 55.—*Meat production, imports, and consumption in Germany, 1904–1906*—Continued.

Class of meat.	Imports.[d]	Exports.[d]	Net imports.[d]	Consumption.		
				Total.	Per capita.	Ratio to total.
1904.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Per cent.*
Veal						
Beef, except veal						
Total beef	147,034,000	3,192,000	143,842,000	2,280,517,000	38.4	35.4
Mutton, including lamb.	379,000	238,000	141,000	127,770,000	2.1	2.0
Pork, including lard	227,805,000	4,538,000	223,267,000	3,922,960,000	66.0	60.8
Total	375,218,000	7,968,000	367,250,000	6,331,247,000	106.5	98.2
Goat				50,999,000	.9	.8
Horse	1,000	4,000	[e] 3,000	62,850,000	1.1	1.0
All other	125,000	3,000	122,000	122,000	(f)	(f)
Total	126,000	7,000	119,000	113,971,000	2.0	1.8
Grand total	375,344,000	7,975,000	367,369,000	6,445,218,000	108.5	100.0
1905.						
Veal						
Beef, except veal						
Total beef	170,805,000	3,697,000	167,103,000	2,082,129,000	34.6	34.2
Mutton, including lamb.	655,000	245,000	410,000	135,412,000	2.2	2.2
Pork, including lard	314,592,000	4,104,000	310,488,000	3,746,045,000	62.2	61.5
Total	486,052,000	8,046,000	478,006,000	5,963,586,000	99.0	97.9
Goat				51,243,000	.9	.9
Horse		4,000	[e] 4,000	75,065,000	1.2	1.2
All other	129,000	5,000	124,000	124,000	(f)	(f)
Total	129,000	9,000	120,000	126,432,000	2.1	2.1
Grand total	486,181,000	8,055,000	478,126,000	6,090,018,000	101.1	100.0
1906.						
Veal						
Beef, except veal						
Total beef	179,561,000	1,732,000	177,829,000	2,055,339,000	33.7	34.1
Mutton, including lamb.	627,000	55,000	572,000	129,368,000	2.1	2.1
Pork, including lard	324,121,000	3,366,000	320,755,000	3,716,773,000	60.8	61.7
Total	504,309,000	5,153,000	499,156,000	5,901,480,000	96.6	97.9
Goat				52,191,000	.9	.9
Horse		6,000	[e] 6,000	74,926,000	1.2	1.2
All other	34,000	144,000	[e] 110,000	[e] 110,000	(f)	(f)
Total	34,000	150,000	[e] 116,000	127,007,000	2.1	2.1
Grand total	504,343,000	5,303,000	499,040,000	6,028,487,000	98.7	100.0

[d] Excluding free ports. The export figures for 1906 are subject to revision.
[e] Net exports.
[f] Too small for expression.

IMPORTS, 1904–1906.

The subject of the importation of meat into Germany has been so much under discussion in recent years that Table 56 is presented to exhibit the imports and exports of different classes of meat and its products during each of the three years 1904–1906. During the first year the imports of all kinds of meat and its products amounted to 375,344,500 pounds. In the following year they were 486,181,300 pounds, and in 1906 they rose to 504,342,600 pounds. The increases are due mostly to the greater demand for animal fats and pork.

TABLE 56.—*Imports and exports of meats, Germany,[a] 1904–1906.*

[Die Ergebnisse der Schlachtvieh und Fleischbeschau im Deutschen Reiche, 1904, Auswärtiger Handel des Deutschen Reichs 1905, Monatliche Nachweise des Auswärtigen Handels des Deutschen Reichs 1906.]

Class of meat.	1904			1905		
	Imports.	Exports.	Net imports.	Imports.	Exports.	Net imports.
Beef:	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
Fresh	30,608,800	1,862,200	28,746,500	43,858,100	1,864,000	41,994,100
Prepared	8,843,400	301,400	8,542,000	15,540,400	260,100	15,280,300
Tallow	51,342,300	1,025,400	50,317,000	58,798,400	1,520,100	57,278,300
Oleomargarin	56,239,700	3,300	56,236,400	52,608,000	52,900	52,555,100
Total beef (including veal)	147,034,200	3,192,300	143,841,900	170,804,900	3,697,100	167,107,800
Mutton (including lamb)	378,800	238,100	140,700	655,000	245,400	409,600
Pork:						
Fresh	10,814,600	442,500	10,372,100	28,560,700	276,700	28,284,000
Prepared	5,154,600	226,000	4,928,700	7,697,900	198,000	7,499,900
Ham	2,150,600	3,459,500	[b] 1,308,900	2,795,700	3,329,600	[b] 533,900
Bacon	5,444,100	213,800	5,230,200	20,666,600	157,200	20,509,400
Lard	204,241,500	196,700	204,044,800	254,871,300	142,900	254,728,400
Total pork (including lard)	227,805,400	4,538,500	223,266,900	314,592,200	4,104,400	310,487,800
Total	375,218,400	7,968,900	367,249,500	486,052,100	8,046,900	478,005,200
Horse meat:						
Fresh	900	4,400	[b] 3,500	.....	2,600	[b] 2,600
Prepared	.....	.....	.....	.....	900	[b] 900
Total horse meat	900	4,400	[b] 3,500	.....	3,500	[b] 3,500
All other meat:						
Fresh	4,600	2,900	1,800	4,900	5,100	[b] 200
Prepared	120,600	200	120,400	124,300	200	124,100
Total all other meat	125,200	3,100	122,200	129,200	5,300	123,900
Total horse and all other	126,100	7,500	118,700	129,200	8,800	120,400
Grand total	375,344,500	7,976,400	367,368,200	486,181,300	8,055,700	478,125,600

[a] Excluding free ports. [b] Net exports.

TABLE 56.—*Imports and exports of meats, Germany, 1904–1906*—Continued.

Class of meat.	1906		
	Imports.	Exports.	Net imports.
Beef:	*Pounds.*	*Pounds.*	*Pounds.*
Fresh	42,526,100	606,700	41,919,400
Prepared	17,685,000	136,500	17,548,500
Tallow	56,617,100	982,200	55,634,900
Oleomargarin	62,732,700	6,600	62,726,100
Total beef (including veal)	179,560,900	1,732,000	177,828,900
Mutton (including lamb)	626,600	55,300	571,300
Pork:			
Fresh	30,613,400	94,100	30,519,300
Prepared	7,716,200	79,800	7,636,400
Ham	3,257,300	2,936,100	321,200
Bacon	15,929,900	84,700	15,845,200
Lard	266,604,500	170,900	266,433,600
Total pork (including lard)	324,121,300	3,365,600	320,755,700
Total	504,308,800	5,152,900	499,155,900
Horse meat:			
Fresh		6,200	[a] 6,200
Prepared		200	[a] 200
Total horse meat		6,400	[a] 6,400
All other meat:			
Fresh	700	400	300
Prepared	33,100	143,300	[a] 110,200
Total all other meat	33,800	143,700	[a] 109,900
Total horse and all other	33,800	150,100	[a] 116,300
Grand total	504,342,600	5,303,000	499,039,600

[a] Net exports.

AUSTRALASIA.

HIGH RATE OF CONSUMPTION.

Estimates of meat consumption in the States of the Commonwealth of Australia and for New Zealand were made for the Royal Statistical Society with results that were published in the Journal of that society for September, 1904.

The extraordinarily high consumption of 254.1 pounds per capita is indicated for Australasia, an average considerably higher than that of the United States. Concerning this the Australian Meat Trades Journal comments as follows:

The Australian is noted for wastefulness. In most cases he refuses to eat anything but freshly killed meat; hashes, stews, and cold meat are his abomination. We should say that fully half the meat cooked is thrown to the dogs. Servants and employees of all sorts refuse anything that is not freshly killed. The climate also is responsible for the large amount wasted. In places where the temperature is for weeks over 100° in the shade, meat can be eaten only on the day it is killed; the balance is thrown away. Again, in other countries there is a plentiful supply of fish for breakfast, besides all sorts of game. In Australia there is a very poor fish supply, and game is almost unknown. If the consumption only were taken, we believe it would be found that we do not eat more meat than the Americans or Britishers.

TABLE 57.—*Per capita consumption of meat in Australasia.*

[Journal of the Royal Statistical Society, September, 1904, page 425.]

State.	Meat.			
	Beef.	Mutton.	Pork and bacon.	Total.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
New South Wales	159.7	120.4	12.2	292.3
Victoria	117.3	71.8	12.2	201.3
Queensland	280.0	90.0	13.3	383.3
South Australia	127.0	75.0	11.4	213.4
Western Australia	141.8	133.9	31.4	307.1
Tasmania	117.8	84.9	14.0	216.7
Commonwealth	155.5	94.1	13.0	262.6
New Zealand	90.0	110.0	12.5	212.5
Australasia	144.4	96.8	12.9	254.1

FRANCE.

ESTIMATES OF MEAT CONSUMPTION.

According to a work to which the Society of Agriculturists of France awarded a prize this year, and for which we are indebted to M. Imbart de la Tour, the consumption of meat per capita is said to be 35.8 kilograms (78.9 pounds), a figure obtained by adding the production of meat in France and the difference between imports and exports.

Mr. Rew, who has made a study in England of the consumption of meat, has arrived at the same figure, 36 kilograms (79.4 pounds) for French consumption and, according to him, France takes sixth place in rank among the countries which are great consumers of meat.

For France, consumption varies between city and country. The urban population, which includes, besides the inhabitants of cities whose population is 10,000 and over, those of the official towns of departments and arrondissements, is about 11,231,211, and the rural population is 27,111,981. The former consume an average of 58.12 kilograms (128.1 pounds), the latter 26.25 kilograms (57.9 pounds).

The foregoing figures are far from marking progress. While in 1862 urban population consumed but 53 kilograms (116.8 pounds) of meat per capita, that is, about 5 kilograms (11 pounds) less than in 1892, the time for which the figure 58.12 is given, it consumed 64.6 kilograms (142.4 pounds) in 1882, or 6 kilograms (13.2 pounds) more than in 1892. The consumption of the rural population, on the contrary, has increased, having advanced from 18.57 kilograms (40.9 pounds) in 1862 to 21.89 kilograms (48.3 pounds) in 1882 and to 26.25 kilograms (57.9 pounds) in 1892.

The diminution in the consumption of the urban population is attributed to the increase in the consumption of alcoholic beverages and to the exodus of the inhabitants of the cities to the country in summer.—L'Economiste Français, August 12, 1905, page 241.

CUBA.

CONSUMPTION, DOMESTIC SLAUGHTER, AND IMPORTS.

[Extract from a letter dated May 29, 1907, from the United States minister to Cuba, summarizing a report in the Gaceta Oficial of May 23, 1907.]

The consumption of meat [of domestic slaughter] was as follows for the year: Beef, 60.25 pounds; pork, 8.5 pounds; and mutton 0.25 of a pound; making a total of about 69 pounds of meat consumed by each inhabitant of Cuba at an approximate cost of $8.75. The highest price for beef was 19 cents per pound and the lowest 9 cents; the highest price for pork, 20 cents, and the lowest 8½ cents; the highest price for mutton, 16 cents, and the lowest 7½ cents.

It will be seen by the foregoing figures that each Cuban family consumes on an average 1 pound of meat [of domestic slaughter] every day, not including dried meat [and other imported meat], which has a large sale, and chickens, codfish, and fresh fish. It is surprising that the consumption of vegetables is small, in view of the natural facilities which the soil fertility and climate afford for the cultivation of garden produce.

To the foregoing statement that the per capita consumption of meat of domestic slaughter in Cuba is 69 pounds should be added the average consumption of the net imports. In recent years the net imports of meat and meat products amount to about 100,000,000 pounds, so that the average per capita consumption of these imports is about 55 pounds, and the entire consumption of meat, home produced and imported, is about 124 pounds.

ITALY.

INVESTIGATION OF DIRECTOR-GENERAL OF PUBLIC HEALTH.

The following statement is derived from a thorough investigation of the slaughter of meat animals in every commune in Italy, made by the Director-General of Public Health.

TABLE 58.—*Slaughter and consumption of meat in Italy in 1903.*

Class of animals.	Number slaughtered.	Pounds of meat.
Cattle	1,492,369	971,765,695
Sheep	4,273,592	129,469,516
Swine	1,504,427	405,558,204
Horses	35,110	18,063,301
Catania, number of animals included above, but only total pounds of meat stated		4,694,765
Total	7,305,498	1,529,551,481
Imports of meat, fresh, salted, smoked, or otherwise prepared, including lard and meat extract, 1903		13,636,028
Total		1,543,187,509
Exports of meat, fresh, salted, smoked, or otherwise prepared, including lard and meat extract, 1903		8,697,675
Total meat consumption in Italy		1,534,489,834
Population, 1901		32,966,307
Per capita consumption ....pounds..		46.5

HORSE FLESH AS FOOD.

HISTORICAL SKETCH OF HIPPOPHAGY.

The eating of horse flesh is steadily increasing everywhere, and in most European countries there are societies for the purpose of combatting the popular prejudice against this food. Only in Austria is there no need for a society, for hippophagy there is so general that no one has a distaste to be removed. Among primitive peoples horse flesh was commonly eaten, and the Germans ate the carcasses of the horses which were sacrificed to Odin. It was only in the eighth century that the Christian populations of Europe ceased to eat horses, when Pope Gregory III formally interdicted the practice. In China the people have eaten horse meat for at least a thousand years. Modern Europeans owe the introduction of this food to Napoleon I, since it was after his invasion of Denmark in 1807 that the population was forced to eat their horses. To him the Germans also now owe the habit, for it was during the great scarcity of food which followed the wars of the first Empire that they took to it. However, they repaid the compliment by obliging the French to follow their example after the war of 1870, the result of which was great scarcity of food in France. But, though the Germans have eaten horse flesh for a century, it was not until 1847, a year of great suffering, that the first horse butcher shop was opened in Prussia.—London Globe.

CONSUMPTION OF MEAT IN MANY COUNTRIES.

COLLECTED RATIOS OF SEVERAL AUTHORITIES.

In view of what is now known concerning meat consumption in this country, the estimates for the United States expressed in Table 59, except those established in this bulletin, are radically understated, even though dressed weight may be the limitation.

For more than a score of countries the per capita meat consumption has been estimated by various authorities and these estimates have been brought together in Table 59. Some of these estimates have been well made and others are evidently very imperfect. The dressed weight of meat is generally the meat for which the estimates are made except in so far as imports include extra edible parts.

The estimates for Australia and New Zealand, if including only the dressed weight of meat, are very high, but may be much qualified by the criticism from the Australian Meat Trades Journal quoted on a previous page.

Subject to reduction on account of a large percentage of household waste, the per capita consumption of meat in Australasia is higher than in any of the other countries included in Table 59.

The United States by far exceeds all other countries outside of Australasia in per capita meat consumption and it is followed in order by Cuba, the United Kingdom, Germany, France, Denmark, Belgium, and Sweden.

TABLE 59.—*Per capita consumption of meat, by principal countries.*

[Expressed in pounds, probably of dressed weight for domestic slaughter unless otherwise stated.]

Country.	This bulletin and other authorities.	Royal Statistical Society, 1902.	Ostertag, for 1890.[a]	Mulhall, published in 1899.
Argentina				140
Austria-Hungary			64	
Australian Commonwealth		262.6	246	[b] 208
Belgium		70		
Belgium and the Netherlands			69	
Canada				129
Cuba	124			
Denmark		76		
France	[c] 78.9	80	74	75
Germany		99	70	[d] 74 [e] 66
1906	98.7			
1905	101.1			
1904	108.5			
1894 (Lichtenfeld)	88			
Great Britain			105	[f] 115
Greece				68
Italy	46.5		23	27
Netherlands				48
New Zealand		212.5		
Poland (Russian)				62
Portugal				44
Russia			48	[g] 50
Spain			49	
Sweden		62		
Sweden and Norway			87	74
Switzerland				75
United Kingdom		[h] 121.3		[f] 108 [i] 93
United States:				
Dressed	185.8	[j] 150	120	141
Dressed and extra edible parts	220.5			
Edible dressed and extra edible parts	182.6			

[a] Quoted by Ostertag as the estimate of the "Statistisches Amt" in England for 1890. Handbook of Meat Inspection, p. 3.
[b] Including New Zealand.
[c] Imbart de la Tour.
[d] 1899.
[e] 1883.
[f] 1895.
[g] Excluding Poland.
[h] 1898–1902.
[i] 1875.
[j] 1885. Stated to be on authority of the U. S. Department of Agriculture.

HIDES AND SKINS.

NUMBER PRODUCED IN 1900.

NATIONAL CONSUMPTION OF BEEF HIDES.

Naturally following from Table 23, which presents the results of this investigation with regard to the number of cattle, sheep, and swine slaughtered in 1900, a mere copying of numbers establishes the number of calfskins, cattle hides, and lamb and sheep skins produced in 1900. The calfskins numbered for that year 5,831,000; the beef hides (exported live cattle not being included), 12,738,000; lambskins, 12,765,000; and the sheepskins 11,783,000. The total skins produced by cattle, including calves, is 18,569,000; by sheep, including lambs, 24,548,000.

Upon combining the production of beef hides with the net imports the approximate consumption of beef hides during one year at about 1900 can be determined. This is presented in detail in Table 61, wherein it appears that to the cattle-hide production of this country should be added imports of 3,130,000 hides and from them should be subtracted domestic exports of 130,000 hides, leaving as a net result of the operation a consumption of 15,738,000 cattle hides.

For the year represented by Table 61 the gross imports were about 20 per cent of the consumption, and the net imports remaining after deducting the domestic exports were about 19 per cent.

TABLE 60.—*Number of hides and skins produced, 1900.*

Class of animals.	Number of hides and skins.
CATTLE.	
Calves under 1 year	5,831,000
Steers:	
1 and under 2 years	1,687,000
2 and under 3 years	2,336,000
3 years and over	1,966,000
Total steers	5,989,000
Bulls 1 year and over	649,000
Heifers 1 and under 2 years	1,687,000
Cows 2 years and over	4,413,000
Total cattle, except calves	12,738,000
Total cattle	18,569,000
SHEEP.	
Lambs under 1 year	12,765,000
Sheep, except lambs	11,783,000
Total sheep	24,548,000

TABLE 61.—*Consumption of beef hides, 1900.*

Item.	Number of hides.
Cattle slaughtered (calves not included)	12,738,000
Imported hides, computed from dry weight, average of 1899–1901	3,130,000
Total	15,868,000
Deduct:	
Domestic exports, hides and skins, all kinds except furs, average of 1899–1901	130,000
Foreign exports (reexports) of "hides and skins" not deducted, partly because the above deduction necessarily includes skins, and also hides other than those of cattle, and partly because the statistics of foreign exports do not separate cattle hides	0
Consumption	15,738,000